Public Utility Commission of Texas



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Honorable Members of the Seventy-Seventh Texas Legislature:

We are pleased to submit our 2001 Report on the Scope of Competition in Telecommunications Markets, as required by Section 52.006 of the Public Utility Regulatory Act (PURA).

Since we issued our previous report on telecommunications competition in January 1999, the Commission has continued to make significant progress in managing the transition to competitive local telecommunications markets. Numerous new providers have entered the market, and the market share held by competitive providers has increased significantly. Recent developments, however, have shown that some of the new providers are having difficulties staying in the residential local exchange market.

In the four largest metro areas of Texas, facilities-based competitors have developed increased capacity for long-run competition with incumbent providers. As a result, the market for business customers in these metro areas has strong potential for genuine competition, although market penetration levels are too low to conclude that full competition has arrived. Whether residential and rural customers will have competitive choices is more uncertain.

Chapter 6 presents an economic diagnosis for why residential and rural customers have largely been left behind in the move to competition. The regulatory tradition of maintaining low (often below cost) rates for residential local telephone service is the key reason. As outlined in the Executive Summary and discussed in its first legislative recommendation, the Commission presents the Texas Legislature with several alternative strategies to create greater opportunity for residential and rural customers to benefit from local exchange competition.

We look forward to continuing to work with you on this and other policy objectives. If you need additional information about any issues addressed in the report, please call on us.

Sincerely,

Pat Wood, III Chairman

Judy W. Walsh Commissioner

Brett A. Perlman Commissioner

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EXECUTIVE SUMMARY

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Competitive local exchange carriers now have the regulatory framework to challenge Southwestern Bell and Verizon for market share in Texas. The Public Utility Commission of Texas (Commission) has certified several hundred new entrants, and those in operation have gained visible market share. While the potential for genuine competition is strong for some markets in Texas, it is less likely to flourish in others. At this time, residential and rural customers are better served by existing price cap regulation of traditional nonbasic local service until more viable and sustainable competitive choices become available to them. The Commission recommends finding the proper balance between protecting residential customers in the short run and promoting competition in the long run for the local exchange residential market.

Progress in Local Exchange Competition

During the last few years, the Commission successfully implemented federal and state legislation to open the service territories of the incumbent local exchange carriers, and competitors have responded to the opportunity. As part of the proceedings that led to the approval of Southwestern Bell's application to enter the long distance market, the Commission approved the Texas 271 Interconnection Agreement (T2A), which provides for a standardized, efficient, and quick way for competitors to enter Southwestern Bell's service territories. The availability of such an agreement is a necessary first step to facilitate the entrance of new competitors into the marketplace. Sprint has voluntarily agreed to develop a standard agreement, but other incumbent local exchange carriers those serving primarily rural areas - are not similarly situated due to the federal exemption for rural carriers from most competition-related requirements. Survey data show that, as of the end of 1999, competitive providers rapidly gained market share in local telephony, as measured in telephone lines operated and in revenues earned. Market penetration is highest in the large metro and suburban areas of Austin, Dallas, Houston, and San Antonio, with more than 30 competitive providers in each metro area by late 2000. Many smaller and medium-sized metro areas, such as Abilene, Beaumont, and Longview, had six to ten competitive providers offering services. Market penetration by competitors in rural areas is very limited, although increasing relative to 1997.

Competitors gained market share among business customers more than among residential customers. Facilities-based competition in the four largest metro areas has provided increased capacity for competitors to compete with incumbent providers in the long run. As a result, the market for business customers in the large metro areas of Texas has strong potential for genuine competition, although the levels of market penetration as of 1999 are too low to declare that full competition has arrived. Whether residential and rural customers will have sustainable competitive choices in the near future is less certain.

Events in the year 2000 have changed conditions for local exchange competition in Texas and across the nation. Competitive local exchange company (CLEC or competitor) stocks have seen a slump in share prices. AT&T, Sprint, and Worldcom announced major company reorganizations with decreased focus on serving residential mass markets. These events suggest that competitors may be heading for a period of consolidation – between companies and within markets. A number of key competitors that were expected to challenge Southwestern Bell and Verizon now seem to be limiting their entry into general residential voice markets.

Because Southwestern Bell can now compete for long distance customers in Texas, the company has made a strong push in 2000 to bundle its offerings to provide residential customers with various options for "one-stop shopping." Using the pricing and packaging flexibility that SB 560 provided, Southwestern Bell raised prices on the majority of its vertical (nonbasic) telephone services for both residential and business customers while lowering prices for nearly a third of those services listed in this report. Southwestern Bell also gained a sizeable portion of the long distance market just months after offering long distance service for the first time. Southwestern Bell's largest and strongest competitors have not been offering substantial competition in vertical services or in bundling local residential services with long distance or other services and have lost market share in long distance service.

While opportunities are in place for CLECs to compete in most areas of Texas, the Commission recognizes that differences in customer characteristics and population density among various regions of Texas affect where CLECs decide they can profitably compete and the type of customers they serve. The willingness of the incumbent local exchange company to work with CLECs is also a factor. At the same time, cross-subsidies that have traditionally kept residential rates artificially low now contribute to the lack of competition for residential customers. The same cross-subsidies have provided cream-skimming opportunities in large metro and business markets.

While the possibilities of competition for local service using traditional wireline are mixed at best, technology is reshaping the competitive landscape of telecommunications. New technologies such as cable, wireless, satellite, and voice over Internet Protocol likely will create new avenues and providers for customers to receive traditional local and long distance voice services, profoundly changing the market structure from the customers' point of view at some point in the future.

Next Step for Local Competition in Texas

The 2001 Scope of Competition Report summarizes the path taken to open century-old monopolies as well as the use of new tools for facilitating competition that the Texas Legislature provided last session. As detailed above, the response has been good in some markets and disappointing in others. The conclusion today is that competition looks viable in the business and urban markets, but may not be as viable for certain rural and residential customers. The Report offers an economic diagnosis for why this pattern has developed, with the primary causes rooted in underlying market conditions and in the historical regulatory pricing system for local telephone service.

Texas has had a long-standing public policy to provide universal service and to maintain low rates for basic residential local service. However, continuing this policy means that some segments of the market may not receive rates that reflect the true cost of the service. In the short term, these segments - most notably residential and rural customers - may need protection from price increases if the market does not effectively moderate them. Indeed, further action may be necessary to ensure that competition comes to these markets at all. The Commission recognizes that short-term remedies are not long-term solutions in regulating a telecommunications industry that is rapidly evolving away from selling simple voice service.

There are a number of ways Texas can go from here. Approaches can be passive or active. The Commission suggests that the Legislature consider the following options for addressing the lack of competition in Texas local residential and rural markets:

Option A: Passive Erosion (no change to current pricing structures).

This is the de facto policy now in effect. If the market is left to behave under current policies, residential customers will continue to have low rates for basic service, but incumbent carriers likely will raise rates further on nonbasic services with little competition under the pricing flexibility granted in SB 560. The economic term for the process of aligning rates to reflect actual costs is called rebalancing. A benefit of allowing these rates to rise is that higher rates for the total set of residential services (even with basic service rates held artificially low) would provide CLECs incentives to offer competitive bundled service packages and to bring new technologies to more areas of Texas. As a result, CLECs may be able to erode the market share of incumbents over the long term.

However, a likely consequence of this approach is that CLECs will serve profitable high-end residential customers and the remaining customers, especially lowend residential and rural customers, may experience price increases for commonly used services for which there are no affordable substitutes at this time. So, while the bundled price of residential telephone services may move closer to its true cost for some customers, the burden of rebalancing prices would continue to be borne by the vertical services user, while basic local services remain subsidized below true cost. From the public's point-of-view, this arrangement may be preferable to having that burden be borne by all residential dial-tone customers.

Option B: Place a temporary, two-year price cap on popular nonbasic residential services that do not currently have competition, and evaluate whether further steps are necessary at the close of the cap to ensure competition in these markets.

This option borrows from both laissez-faire and regulatory economics. Placing caps on residential call forwarding, caller ID, and call return, - the prices of which have increased substantially since SB 560 became effective - would moderate the burden borne by residential customers during the transition to competition for local exchange markets.

Most residential and rural customers receive basic local services at rates well below their true cost (with the remainder of the cost subsidized by Texas and federal universal service payments and over-priced vertical or nonbasic services). The best hope

many of these customers have for competition is from alternate technologies – such as wireless, satellite, or cable – that are not yet cost-competitive with landline basic local service. Landline local exchange competitors may never be competitive with incumbent-provided basic local service at current, subsidized rates. Therefore, the primary benefit of price caps on nonbasic services would be to temporarily protect residential customers from further price increases for services that have already seen large price increases. Such a strategy would allow the opportunity to see if the bundled local service package is priced high enough to allow more competitors to serve more residential and rural customers.

A disadvantage of this approach is that competitive providers need sufficient profit to fight for and win market share from incumbent carriers. Caps on vertical services will also affect competitors' profits slowing innovation in telephony services. At the present time, the Commission has observed that incumbent carriers are often charging prices for nonbasic services that are 5 to 10 times higher than their costs and, in an extreme case, 100 times higher than their costs. Capping prices at these levels would not limit opportunities for competitors to enter the market profitably.

Option C: Authorize and direct the Commission to hold a proceeding to rebalance costs into a structure that gives competitive providers the incentive to compete in residential and rural markets.

Most residential customers get a majority of their basic local services below cost. Rebalancing of rates would establish residential and rural rates that more closely, reflect the true costs of service. CLECs would have greater incentives to enter new markets in Texas with a wider range of sophisticated services for customers outside the large metro areas. Higher, rebalanced local rates would give local service providers much more economic headroom to deploy advanced telecommunications technologies and services for rural and residential customers.

This approach, however, has several drawbacks. After years of subsidized low rates, many customers would face increases in basic service rates as a result of rate rebalancing. Determining the proper, cost-based price for basic service in a given area would be difficult. Raising the rates for basic local services to meet costs might not permit competition anyway, as lower income and sparsely populated areas of Texas may never be profitable enough to attract competitors in traditional local service for reasons other than retail pricing.

Option D: Combine Options B and C

Combine Options B and C for a comprehensive solution that includes the short-term protection of price caps and the long-term incentives of rebalancing prices to more fully reflect costs. The advantage of this approach is that any negatives associated with the moratorium on certain residential service prices under Option B can be evaluated and adjusted in the course of rate rebalancing. Furthermore, such a proceeding and its implementation are likely to take most of the two years of the Option B moratorium. The cap on prices may mollify negative public reactions that otherwise could result from higher prices, while allowing residential and rural customers to reap the benefits of a wider range of telephone services in the future.

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While one of these approaches may be desirable, the Commission believes that long-term re-regulation of residential and rural markets should not be necessary. While monopoly power is still a factor in residential and rural markets at this time, new technologies appear to have the potential to stimulate vigorous competition in a number of parts of Texas in the years to come. Until then, the Legislature's price cap on traditional phone services serves as an appropriate customer protection.

CHAPTER 1: LEGISLATIVE PARAMETERS FOR LOCAL COMPETITION

The beginning of local exchange competition in Texas is evident. Competitive telecommunications providers now have fair access to networks to provide local exchange service in Texas. Over the past two years, the Commission and interested parties have hammered out the details of a procedural and structural framework for local competition that gives competitors ready access to the Texas markets. The transformation is sufficient to firmly position Texas for the development of long-term, sustainable competition and for increased customer choices in telecommunications services.

Texas met the challenges of federal laws and regulations regarding local competition, which give state commissions great responsibility for their implementation. For example, state commissions must approve or reject agreements among competitors and incumbent providers to interconnect their networks, and they have primary responsibility for arbitrating and mediating such agreements if asked to do so by the negotiating parties. State regulators are also charged with developing and implementing cost-based prices for many provisions of interconnection agreements. While the basic blueprint for local competition is established on the federal level, the front line for implementation is the state level.

A number of the implementation developments in Texas are quite extraordinary, as reflected in the fact that they have been closely watched and are now routinely mirrored by other states. They are the result of contributions by many people representing many constituencies, including new market entrants, incumbent local telephone companies, the U.S. Department of Justice, the Federal Communications Commission (FCC), and the Texas Commission commissioners and staff. All shared a vision of a competitive future for telecommunications in Texas, although each viewed the details from different perspectives and interests. These entities contributed thousands of hours to deliberations and/or negotiations. The result is that many of Texas' nearly 20 million people have at least some choice in the provision of local telephone service.

How and why did we get here? Formative legislation at both state and federal levels set the stage for this transformation. Chapter 1 highlights the relevant history and directives of that the threshold legislation.

Key Legislation

TEXAS HOUSE BILL 2128 (A.K.A. PURA 95)

In 1995, the Texas Legislature adopted House Bill 2128 (HB 2128), which significantly amended the Public Utility Regulatory Act (PURA) with regard to telecommunications. It mandated the opening of local exchange telecommunications markets in Texas, particularly in areas served by Southwestern Bell Telephone Company (SWBT) and GTE Southwest Incorporated. The law provided a framework for competitive local exchange carriers (CLECs)¹ to obtain authority from the Commission to provide local exchange service through any of three avenues, including by building network facilities,² leasing local loops,³ or reselling another company's telecommunications services.⁴ Additionally, HB2128 established the duty of telecommunications providers to "interconnect" their networks with each other.⁵

FEDERAL TELECOMMUNICATIONS ACT OF 1996

On February 8, 1996, Congress enacted the federal Telecommunications Act of 1996 (FTA),⁶ which paralleled HB 2128 in numerous ways, and fundamentally changed telecommunications markets for the entire nation. The FTA was the most dramatic change in telecommunications law since Congress passed the Communications Act of 1934. Three principal goals established by the telephony provisions of the 1996 Act were (1) opening the local exchange and exchange access markets to competitive entry; (2) promoting increased competition in telecommunications markets that were already open to competition, including the long-distance services market; and (3) reforming the system of universal service so that universal service would be preserved and advanced as the local exchange and exchange access markets move from monopoly to competition.

TEXAS SENATE BILL 560 AND SENATE BILL 86

The transition from monopoly to competition could not and did not occur quickly. In 1999, the Texas Legislature revised PURA by enacting two bills dealing with the provision of local exchange telephone service. SB 560 increased flexibility for incumbent local exchange companies (ILECs) in pricing and packaging telecommunications services. The Texas Legislature also passed SB86 to ensure customer choices and protections.

¹ Perspectives on CLEC market share are discussed in Chapter 3. Certificated CLECs are listed in Appendix G.

² PURA95 § 3.2531. The remaining part of this section is now in PURA Ch. 54, Subchapter C.

³ PURA95 § 3.453 (now PURA Ch. 60, Subchapter C). In addition, PURA95 § 3.453 (now PURA § 60.021) directed ILECs to unbundle their networks to the extent ordered by the FCC.

⁴ PURA95 § 3.453 (now PURA Ch. 60, Subchapter C).

⁵ PURA95 §3.458 (now PURA Ch. 60, Subchapter G).

⁶ Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56 (1996) (1996 Act). The 1996 Act amended the Communications Act of 1934. 47 U.S.C. §§ 151 *et seq.* (FTA).

Key Features of the FTA

THE TRILOGY: LOCAL COMPETITION, UNIVERSAL SERVICE, & ACCESS CHARGES

The FCC views the FTA as a trilogy, *i.e.* a three-pronged plan. The first prong of the trilogy consisted of opening local exchange and exchange access markets to competition.⁷ The FTA requires all local exchange carriers (LECs), not just incumbents, to interconnect so that competing carriers can provide service.⁸ The second prong of the trilogy is universal service reform. Consistent with FTA §254, *Universal service*, the FCC believes the universal service support system must guarantee affordable telephone service to all Americans in an era in which competition will be the driving force in telecommunications (*see* Appendix A). The third prong of the trilogy is access charge reform.⁹ Because a competitive market drives prices toward cost, the then-existing system of access charges was unsustainable because access charges were widely believed to be significantly higher than the cost of providing access (*see* Appendix B).

METHODS OF COMPETITIVE MARKET ENTRY

The FTA §251(a)(1) requires all telecommunications carriers to interconnect with the facilities and equipment of other telecommunications carriers, allowing competitors three ways to serve customers.

- Resale Under this entry method, competitors have the option to purchase telecommunications services from another LEC at wholesale rates and resell those services to their own customers at retail rates. Competitors often use resale as a transitional entry strategy while building a proprietary network over a period of months or years.
- Access of Unbundled Network Elements This entry method enables competitors to lease discrete parts of an ILEC's network facilities and equipment that are used to provide telephone service at cost-based rates. These leased parts of the ILEC network are referred to as "unbundled network elements" (UNEs). Competitors can combine leased UNEs with their own facilities and/or resold services.

⁹ Access charges are per-minute charges billed by LECs to long distance companies for access to the local exchange network so that long distance companies can originate and terminate long distance calls.

⁷ Opening local markets was accomplished primarily through FTA § 251, *Interconnection*, and § 252, *Procedures for negotiation, arbitration, and approval of agreements*. Additionally, special provisions for opening local markets contained in FTA § 271, *Bell operating company entry into interLATA services*, pertain only to Bell Operating Companies.

⁸ FTA §251(a)(1).

¹⁰ All LECs are required to make their telecommunications services available for resale pursuant to FTA § 251(b)(1). However, only *incumbent* LECs are required, pursuant to FTA § 251(c)(4), to make their retail telecommunications services available for resale at a wholesale discount.

Construction of New Facilities – A competitor may enter a local telephone market by building entirely new facilities. Under a full "facilities-based" method of entry, a competitor builds all of the network that it needs to serve customers, including the "last mile" or "local loop" – the connection to a customer's premise. Because telecommunications networks are capital-intensive, there are relatively few facilities-based carriers compared to the number of resellers and UNE-based carriers.

THE SECTION 271 "CARROT"

Section 271 of the FTA allows a Bell Operating Company (BOC) to enter the long distance market after the BOC *proves* that it has opened its local market to competition.

Bell Operating Companies were created in 1984 with the divestiture of AT&T, and were granted monopoly status to provide local service, subject to regulation by the states. At that time, BOCs were prohibited from competing in the interLATA long distance market to prevent them from committing anti-competitive practices against long distance providers.

Clearly, the FTA's requirement that the former monopoly BOCs open their networks to competitors, resulting in a loss in market share and power, was a tall order. Because entry into the long distance market would allow a BOC to offer its customers "one stop shopping," the Section 271 provisions created an incentive to BOCs to cooperate with the FTA mandate to open their networks to local competition.

FEDERAL-STATE SHARED RESPONSIBILITY FOR IMPLEMENTATION

Implementation of the FTA has led to parallel proceedings at state and federal levels, covering similar issues, in similar time frames, affected by court challenges. Often, interplay across proceedings occurred.

The FTA's blueprint for encouraging local exchange competition placed great responsibility on the FCC and state commissions to implement the law. Only six months after adoption of the FTA, the FCC produced two comprehensive documents charting a course for implementation. Some of the FCC's interpretations were challenged in federal court, and many of the FCC's interpretations of FTA requirements were affirmed. Where specific FCC findings were not affirmed, federal and state regulators adjusted through regulatory rule and other processes.

¹¹ In 1984, there were seven Regional BOCs, made up of a total of 29 BOCs.

Although the FCC establishes nationwide guidelines, state regulators play a major role in implementing key provisions of the FTA. For example, state Commissions must approve or reject interconnection agreements, and they have primary responsibility for arbitrating and mediating such agreements if asked to do so by the negotiating parties. State regulators are also charged with developing and implementing cost-based prices for interconnection and UNEs.

¹³ In its initial Order implementing the local competition provisions of the FTA in August 1996, the FCC established rules about how interconnection between incumbent and competitive carriers would be accomplished, how the competitors would be allowed to collocate equipment in the incumbent's structures,

Implementation of the FTA was and continues to be a phenomenal undertaking - the magnitude of which could not have been realized when the FTA was adopted. The web of multi-faceted and concurrent activities that produced the framework for and growth of local competition in Texas is a story told in Chapter 2.

which parts of the incumbent's network would be open to competitors, and through which states would be able to establish rates for competitors' interconnection. After the FCC released its ruling, several parties, including some state regulators, challenged the decision before the U.S. Court of Appeals for the Eighth Circuit. The Eighth Circuit overturned many of the FCC's rules on the grounds that the FCC had exceeded its authority and misinterpreted the Act. In early 1999, the U.S. Supreme Court issued a decision that noted that the Act was vague in some respects, affirmed the FCC's rulemaking authority to implement the local competition provisions of the Act, and upheld most of the FCC's rules. The case was sent back to the lower court for further proceedings consistent with the Supreme Court's decision. While court challenges raged on, state regulators and the FCC moved forward with the implementation of competition in local exchange markets.

CHAPTER 2: THE IMPLEMENTATION STORY

The contested case in which Southwestern Bell Telephone Company (SWBT) sought the Commission's support to enter the long distance telecommunications market is often simply called "271" because the issue at hand was whether and how SWBT met the conditions set forth in Section 271 of the FTA. The case became longer and more complex than anticipated in the early stages, and grew to encompass developments in numerous concurrent proceedings.

While working through the ever-widening details, the 271 case moved a reluctant incumbent into a mode of cautious cooperation to make the local exchange service market accessible to competitors. The monopoly and its competitors were linked together by unavoidable technical, operational and legal issues, and persevered to engineer the beginning of local competition.

The FTA and Texas statutes¹⁴ provided the initial directive and the basic components of a framework for implementing local exchange competition in Texas. The forum for implementing these laws became the 271 case. It is the centerpiece of the story, and where we begin this chapter. With hundreds of millions of dollars at stake, both for incumbents and new market entrants, the 271 case will perhaps have the most far-reaching effect on telephony of any single case in the Commission's history.

Chapter 2 tells the story of the 271 case and other regulatory developments of the past two years that are central to the framework of local exchange competition in Texas.

<u>Implementation of FTA Section 271</u>

Section 271 is the section of the FTA that allows a Bell Operating Company (BOC) to enter the long distance market¹⁵ after the BOC proves that it has opened its local exchange markets to competition from other local exchange providers. The long distance market was the carrot Congress dangled in front of the BOCs to encourage cooperation in opening local exchange markets to competition.¹⁶ (The second-largest ILEC in Texas, GTE Southwest Incorporated, was also obligated to open its networks to competitors via interconnection agreements, but the Section 271 incentive to do so was not applicable since it was not a BOC). SWBT, eager to offer one-stop shopping to its

¹⁴ See FTA §§271 and 251, SB 560 and SB 86.

¹⁵ In this context, the BOC is permitted to enter the in-region, interLATA long distance market. In other words, it is allowed to offer long distance service across LATA boundaries within its own region.

¹⁶ The BOCs were created in 1984, as a result of the divestiture of AT&T, and were granted exclusive franchises to provide local service, subject to regulation by the states. At that time, BOCs were prohibited from competing in the interLATA long distance market.

Texas customers, was the second BOC in the U.S. to meet the requirements of Section 271 17

The FTA obligated SWBT to open its network to local competition regardless of its interest in becoming a competitor in the long distance market. However, because SWBT, the BOC of Texas, was quick to initiate its application to enter the Texas long distance market, SWBT's 271 proceeding became the venue where the implementation issues for other FTA provisions were identified, negotiated, and resolved.

SWBT's 271 APPLICATION

On March 2 1998, SWBT delivered its *Notice of Intent to File Section 271 Application for interLATA Authority in Texas* (the 271 application) to the Commission.¹⁹ To support the application, forty-seven affidavits were provided by dozens of SWBT witnesses, including the economist Alfred Kahn, to argue that SWBT's application met the requirements of Section 271 of the FTA and was in the public interest. The Commissioners presided over a lengthy hearing. CLECs alleged, through dozens more affidavits, that SWBT had engaged in anti-competitive and discriminatory behavior, thwarting their efforts to enter local exchange markets. SWBT responded to some allegations and denied others.

After the hearing concluded, the Commission found that SWBT had done much to open the local market to competition. Nevertheless, the Commission determined that SWBT's application did not fully comply with the requirements of Section 271 of the FTA. While denying the application, the Commission gave SWBT recommendations on how to meet the requirements of Section 271 (sometimes referred to as the "roadmap"). The first and most important recommendation was to establish a collaborative process to address all issues in dispute. Through the collaborative process, agreement eventually was reached between the parties on 129 specified issues.

WHAT SWBT HAD TO PROVE

Section 271 of the FTA requires a BOC to establish the following before it is allowed to offer long-distance services.

• the presence of a facilities-based competitor providing local service to residential and business customers under an Interconnection Agreement

¹⁷ Bell Atlantic, the BOC for New York state, was the first to gain FCC approval to provide inregion interLATA long distance. Bell Atlantic has since merged with GTE to form Verizon.

¹⁸ FTA § 251 requires a BOC to open its network to local competition by developing agreements with competitors to "interconnect" its network with the competitors' networks (pursuant to interconnection agreements). The arbitration provisions included in § 252 for achieving the § 251 interconnection mandate, combined with the fact that interconnection was a threshold condition in § 271 for a BOC to enter the long distance market, created the result in Texas that many of the specific terms and conditions necessary to fulfill the § 251 mandate were actually negotiated in the context of SWBT's § 271 proceeding. (*See* "FTA Sections 251 and 252" subsection of this chapter.)

¹⁹ Pursuant to § 271, a BOC files its notice of intent with the state regulatory agency first and, only after receiving support from state regulators, files an application with the FCC for approval.

pursuant to FTA Section 252²⁰ or a statement of generally available terms and conditions;

- that it is providing the 14 "checklist" items;²¹
- that the BOC's entry into the long distance market is consistent with the public interest, convenience, and necessity; and
- that the provision of long distance service meets the separate affiliate and nondiscriminatory safeguards requirements of FTA Section 272.

THE COLLABORATIVE PROCESS

The collaborative process was the term coined to describe a series of round-table, face-to-face discussions held with all interested

parties present and commission staff facilitating. Not only did ILECs, CLECs and the Commission staff participate in the collaborative process, but representatives from the U.S. Department of Justice also participated at pivotal points in the negotiations.

The collaborative process proved to be a successful forum for bridging philosophical and operational chasms. For more than nine months, dozens of 'collaborative work sessions' were held to hammer out the minutiae of opening local markets. This effort culminated with the Commission's approval of a Memorandum of Understanding on April 29, 1999 and approval of the Texas 271 Agreement (T2A) on October 13, 1999. Finally, on December 16, 1999, upon review of actual wholesale performance data, the Commission determined that local markets were irreversibly open to competition in Texas and, therefore, voted to send a recommendation to the FCC supporting SWBT's Section 271 application. To reach its conclusion, the Commission determined that SWBT's application and commercial performance met the requirements of Section 271 of the FTA. Similarly, the Department of Justice later supported the application. The FCC concluded that local markets were irreversibly open to competition

THE 14-POINT CHECKLIST

- 1. Interconnection
- 2. Access to UNEs
- 3. Access to poles, ducts, conduits and rights-of-way
- 4. Unbundled local loops
- 5. Unbundled local transport
- 6. Unbundled local switching
- Access to 911, directory assistance, and operator services
- 8. White pages directory listings
- Access to telephone numbers
- 10. Access to databases and associated signaling
- 11. Number portability
- 12. Local dialing parity
- 13. Reciprocal compensation
- 14. Resale

²⁰ The Texas 271 Agreement (T2A), discussed later in this chapter, was developed in compliance with FTA Section 252. The fact that several competitors signed a T2A agreement with SWBT gave SWBT basis to meet this Section 271 requirement.

²¹ Of these items, the most difficult to resolve were No. 1, Interconnection, including trunking and collocation issues; No. 2, Access to UNEs, especially as pertained to the non-discriminatory provision of UNE combinations and the provision of operations support systems; and No. 4, Unbundled local loops, especially as pertained to xDSL and hot cut loop provisioning.

²² Before determining if approval should be given, the FCC is required to consult with the relevant state commission. The FCC depends upon the state commission to develop a detailed and extensive factual record and to resolve all factual disputes.

and, thus, approved SWBT's 271 application on June 30, 2000. SWBT began offering interLATA long distance to its local exchange customers on July 10, 2000.

PERFORMANCE MEASURES

State and federal directives require that an ILEC may not unreasonably discriminate against another provider, with numerous specific prohibitions.²³ The critical, market-opening provisions of FTA Section 251 are incorporated in FTA Section 271 as conditions for a BOC to enter the long distance market. In particular, the BOC must demonstrate that it is offering interconnection and access to network elements on a nondiscriminatory basis. A BOC must provide *parity* access that is equal to the level of access that the BOC provides itself, its customers, or its affiliates, in terms of quality, accuracy, and timeliness. For the functions that have no retail equivalent, the BOC must demonstrate that the access it provides to competing carriers would offer a *meaningful opportunity to compete*.

To ensure that parity and meaningful opportunity to compete would be ongoing after 271, the Commission implemented performance measures. During the mega-arbitrations conducted in 1997 and 1998,²⁴ issues related to performance measures were highly disputed, but 66 performance measures were established.

During the 271 proceeding this biennium, new issues became the subject of dispute and generated the development of more performance measures. A CLEC coalition that included CLECs that did not participate in the mega-arb identified processes and activities not captured by the first performance measures, including the need for a remedy plan when SWBT fails to meet the measures. The Commission used the collaborative process to address such interests and to fine-tune the performance measurement system based on the experience in the market place.

Performance measures now number 132. A critical policy decision was made to break down each measure by geographic region of the state in order to ensure that the standards are not ignored in some areas by a company and averaged out by high performance in other regions.²⁵ The major categories of performance measures to be met in each region (further broken down by service) are pre-ordering, ordering, provisioning, maintenance, collocation, and database accuracy.

Concurrent with establishment of standards by the collaborative process, the Commission approved a Performance Remedy Plan. The Plan is two-pronged:

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²³ Specifically, an ILEC may not unreasonably discriminate against another provider by refusing access to the local exchange; refusing or delaying interconnection; degrading the quality of access; impairing the speed, quality, or efficiency of the line used by the provider; failing to fully disclose in a timely manner all available information necessary to design equipment to meet specifications of the network; or refusing or delaying access by a person to another provider. PURA § 60.161.

²⁴ See Appendix K.

²⁵ SWBT must meet the performance measures in each of the following geographic regions of Texas in which it operates: (1) Houston, (2) Dallas Fort Worth, (3) Central and West Texas, and (4) South Texas.

- Tier 1 measures are those that are "customer affecting." If it fails such a measure (allowing for statistical variance), SWBT pays the CLEC liquidated damages to compensate for substandard performance.
- Tier-2 measures are both "competition and customer affecting," and therefore are subject to assessments payable to the Texas State Treasury in the event the performance delivered to CLECs is non-compliant for three consecutive months. The goal of Tier-2 is to incent parity performance and disincent anti-competitive behavior; that is, to make the cost of non-compliance more than the "cost of doing business."

Payment amounts are classified as high, medium, and low based on the measures' impact on CLECs and competition. SWBT is required to file monthly performance measure reports on a password protected Internet site. Payments are due 30 days from the report date. By the end of October 2000, SWBT made \$4.2 million in payments for non-compliance with performance measure standards. This total reflects good performance in light of the fact that the annual cap for tier-1 liquidated damages and tier-2 assessments is set at \$298 million.

THE TEXAS 271 AGREEMENT (T2A)

For SWBT to qualify under Section 271 and for CLECs to be able to compete, there must be interconnection agreements with ILECs in all areas in which they wish to compete. The process of individually negotiating agreements was time consuming and very costly. During the collaborative process, most such agreements were about to expire, leaving no guarantee of sustainable competition. The Commission and SWBT negotiated an interconnection agreement that complied with the FTA. As a condition of receiving 271 approval, SWBT agreed to offer that standard interconnection agreement to all CLECs for a period of four years. The creation of this Texas 271 Agreement, or T2A, reflects pro-competitive policies and terms that few CLECs could have negotiated on their own. The T2A is being widely replicated as a standard interconnection agreement in other states. The T2A is a comprehensive contract including in part:

- A performance remedy plan with 132 performance measures relating to all aspects of SWBT's wholesale operations. The performance measures are reviewed by the Commission staff every six months and refined, to the extent necessary.
- Prices, terms and conditions for resale, interconnection and the use of UNEs (individually and in combination). As reflected in the T2A, SWBT agreed during the collaborative process to provide combinations of UNEs, including in part the unbundled network element platform for existing and new lines and Enhanced Extended Loops.
- Specific provisions for Digital Subscriber Line (xDSL) service, although DSL needs were not anticipated when the 271 process began in 1998.²⁶

²⁶ DSL is a high-speed digital service that appeals to a significant number of customers in Texas. xDSL refers to a generic version of DSL.

- Operations Support Systems (OSS) OSS refers to the systems, databases, and personnel that ILECs use to provide service to their customers. SWBT demonstrated that its OSS systems provide CLECs with parity or a meaningful opportunity to compete.
- Hot Cut Loop Provisioning—Hot cut loop provisioning is used when a CLEC owns
 its own switch and purchases a UNE loop from SWBT in order to convert a SWBT
 customer to a CLEC customer. In that situation, the loop must be disconnected from
 SWBT's switch and connected to the CLEC's switch. SWBT agreed that service
 disruptions that affect end use customers would be minimized.

COLLOCATION

To establish a pro-competitive policy framework for telecommunications, one of the FTA's core provisions requires ILECs to provide for physical collocation of equipment needed for interconnection or access to UNEs at the premises of the ILEC. The rates, terms, and conditions of the collocation must be just, reasonable, and nondiscriminatory. If it is shown that physical collocation is not practical, virtual collocation may be provided. In a physical collocation arrangement, a competitor leases space at an ILEC's premises for its equipment. The CLEC has physical access to this space to install, maintain, and repair its equipment. In a virtual collocation arrangement, the CLEC designates the equipment to be placed at the ILEC's premises, but does not have physical access to the incumbent's premises. Instead, the equipment is under the physical control of the ILEC, which is responsible for installing, maintaining, and repairing equipment designated by the CLEC.

The FCC's rules require ILECs to provide physical collocation on a "cageless" basis. In a "caged" physical arrangement, a CLEC leases and has direct physical access to caged space at an ILEC structure for its equipment. Cageless physical collocation eliminates the cage surrounding the CLEC's equipment. FCC rules also require ILECs to provide "adjacent" physical collocation, in which the CLEC's equipment is located within a vault or similar structure that the CLEC or its contractor constructs on property leased from the ILEC.

Early versions of interconnection agreements in Texas required CLECs to obtain "caged" collocation. The T2A and collocation tariffs developed during the collaborative process resulted in an obligation by SWBT to provide cageless collocation under some of the most aggressive terms and timeframes in the nation.

Post-271 Activities

While Section 271 approval was initially a powerful incentive for SWBT to cooperatively open its local exchange markets to competition, the Commission recognized that lasting customer/supplier business relationships are needed to sustain local competition. In that regard, the Commission established a number of structured processes to foster the development of a healthy provider-customer relationship between SWBT and CLECs.

As part of the collaborative process, SWBT committed to participate in forums designed to address specific areas of potential concern. SWBT agreed to a trunking users group, a change management process and working group, an xDSL working group, and a general users group. Also, in recognition of the fact that **operational issues** between companies often need immediate attention, the Commission established Project No. 21000 to allow CLECs or SWBT to file a request for expedited, informal dispute resolution.

- **Trunking Forum**. The trunking forum was established as one vehicle for addressing trunk blockage problems. Through the trunking forum, SWBT and CLECs share in network planning. The trunking forum meets on a regular basis, with Commission staff participation, to ensure that adequate planning will forestall blockage problems.²⁷
- Change Management Process. The change management process controls the dynamic environment of OSS systems using a negotiated document, Interface Change Management Process: SWBT and Competitive Local Exchange Carrier. The change management document outlines processes for accomplishing changes to existing network interfaces, introducing new interfaces, retirement of existing interfaces, and testing. The document also explains each outstanding issue solution and the process for a "go/no go" vote before release of a process change.
- **DSL Working Group**. The DSL working group establishes competitively neutral spectral compatibility standards and spectrum management rules and practices for deployment of loop technology absent national industry standards.
- **General Users Group**. SWBT and the CLECs formed a general users group to address issues other than trunking, DSL, and OSS. The Commission also has developed an informal resolution process to address post-interconnection agreement disputes resolution process to expeditiously handle issues not mutually resolved by SWBT and its wholesale customers.
- **Performance Measure Review**. Finally, SWBT, CLECs and commission staff conduct a review of the performance measurements every six months to ensure that they continue to adequately measure SWBT's provision of wholesale telecommunications service to CLECs. In August of 2000, the Commission completed its first six-month review and approved changes to the performance measures and the Performance Remedy Plan. Commission staff members monitor SWBT's performance data on a monthly basis to determine whether SWBT continues to provide CLECs with parity performance²⁸ or a meaningful opportunity to compete. Telcordia, the third-

 $^{^{27}}$ The meetings are taped; the audiotape and agenda of each meeting is filed in PUC Project No. 20400.

²⁸ In this context, parity means that SWBT's provision of services to CLECs must be equivalent to the services SWBT provides to itself and its affiliates.

party vendor that conducted SWBT's original OSS testing, is conducting limited follow-up to its original testing.

Many of the major issues fleshed out in the SWBT 271 proceeding were negotiated in accordance with other provisions of the FTA, discussed in the following subsection of this chapter.

FTA Sections 251 and 252

ARBITRATIONS AND DISPUTE RESOLUTION

Under Section 252 of the FTA, an ILEC and a telecommunications carrier have two options for securing an interconnection agreement. The first option is that an agreement may be arrived at through voluntary negotiation between the two parties. When two parties reach agreement on their own, FTA §252(a)(1) requires that the negotiated agreement be submitted to the state commission. Between September 1, 1998 and August 31, 2000, 616 negotiated interconnection agreements were filed at the Commission. The second option is for an ILEC and a telecommunications carrier to request compulsory arbitration, if the parties are not able to reach agreement on any or all of the rates, terms and conditions in an interconnection agreement. FTA §252(b) places responsibility for such arbitrations on state commissions. Between September 1, 1998 and August 31, 2000, twenty-five requests for arbitration and twenty-three post-interconnection disputes were filed at the Commission. FTA Section 251 contains many of the overarching guidelines relevant to the arbitration of interconnection agreements.

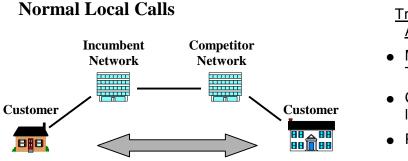
The arbitration of interconnection agreements is a top priority for the Commission. The Commission's first step to comply with the FTA Section 251 mandate to open local markets began when five would-be competitors of SWBT filed for arbitration of interconnection issues in 1996. The Commission consolidated the proceedings and completed the initial and primary arbitration just prior to the issuance of the 1997 Scope Report. Decisions on additional issues were made in the second phase of the arbitrations. The results of these consolidated proceedings, known as the "mega-arb," provided the foundation for many more arbitrated agreements this biennium.

Following is a description of a few high profile arbitrations that resulted in precedential decisions on interconnection issues during the 1999-2000 biennium.

²⁹ Pursuant to FTA authority, the Commission promulgated procedural rules for dispute resolution and approval of agreements. The rules set out procedures for mediation, compulsory arbitration, the review and approval of both negotiated and arbitrated interconnection agreements, and post-interconnection disputes. A proceeding filed pursuant to the FTA and/or the Commission's dispute resolution rule is not considered a "contested case" under the Texas Administrative Procedures Act. Disputes that arise after parties have entered into an interconnection agreement may be filed at the Commission pursuant to the procedures set out in Subchapter Q of the Commission's procedural rules. The rules provide various options for seeking resolutions of disputes, including informal settlement conferences, formal dispute resolution, expedited final rulings, and interim rulings.

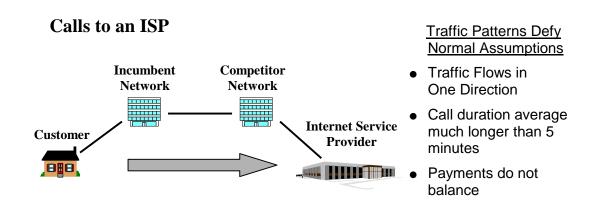
RECIPROCAL COMPENSATION

When a customer of one local company calls the customer of another local company, compensation has traditionally been paid to the second company for use of its network to complete the call. This reciprocal compensation was reasonably balanced when phone customers were making local voice calls with approximately equal duration. However, it became an issue for Internet calls because these calls tended to be all incoming calls, and tended to be of long duration. Some CLECs saw an opportunity to profit from the peculiar nature of Internet traffic. The ILECs objected to paying compensation for these non-traditional calls.



Traffic & Payment Assumptions

- Multi-Directional Traffic Flow
- Call duration average less than 5 minutes
- Payments balance out



The core issue regarding reciprocal compensation this biennium was whether local calls to access the Internet should be considered interstate in nature and, therefore, not subject to reciprocal compensation, or whether such calls should be considered local and, therefore, subject to reciprocal compensation. The Commission determined that

local calls to access the Internet are local calls subject to reciprocal compensation.³⁰ Additionally, the Commission decided other major issues, as outlined below.

The FTA provides that local telephone companies must compensate each other for terminating each other's local telephone calls. The FTA also requires that a determination be made by state commissions of the just and reasonable rates for local interconnection. Therefore a determination as to whether calls to the Internet are local or not is key. ILECs contend that Internet-bound traffic is not local traffic, as it does not terminate at the ISP server, and is therefore not subject to reciprocal compensation as local traffic under the FTA. CLECs, however, contend that Internet-bound traffic does terminate at the ISP server, making such calls local in nature.

In February 1999, the FCC determined that ISP-bound calls are predominantly interstate calls and not subject to reciprocal compensation under the FTA. Earlier this year, the United States Court of Appeals for the District of Columbia Circuit vacated the FCC's determination that Internet traffic is not subject to reciprocal compensation. The court remanded the case to the FCC for want of a better explanation of its reasoning. The FCC then ruled that, pending adoption of federal rules governing compensation for Internet traffic, state commissions may determine appropriate compensation for the termination of Internet calls. During this interim period, state commissions are free to require or not require compensation for Internet traffic. As stated previously, the Commission requires reciprocal compensation for Internet traffic.

In January of 2000, the Commission initiated a proceeding to thoroughly examine the policies, practices, procedures, rules, and rates applicable to reciprocal compensation pursuant to Section 252 of the FTA. It consolidated requests to arbitrate reciprocal compensation for the transport and termination of local telecommunications traffic between SWBT and CLECs desiring arbitration and interconnection.³¹ The commission issued decisions on four major issues for which an extensive record was developed. The issues included the types of telecommunication traffic that should be subject to reciprocal compensation, the method to be used to determine intercarrier compensation, the rates that should be charged, and the appropriate method for billing all calls defined as local calls. On August 31, 2000, the Texas Commission released its Revised Order adopting new rate structure and rate levels for reciprocal compensation payments.³²

³⁰ Complaint and Request for Expedited Ruling of Time Warner Communications, Docket No. 18082, Order (Feb. 27, 1998).

³¹ Proceeding to Examine Reciprocal Compensation Pursuant to Section 252 of the Federal Telecommunications Act of 1996, Docket No. 21982.

³² Included in the Revised Order are the following rulings: 1) SWB will pay CLECs a 'tandem blended rate' for all "balanced" traffic within the 3:1 ratio; 2) the blended rate would be based on a bifurcated end office rate plus 42% of the sum of tandem switching and inter-office transport costs; 3) a bifurcated end office rate only will apply to out-of-balance traffic (over a 3:1 ratio); 4) upon determination of actual tandem or tandem-like functionality, the terminating carrier will receive, on a going forward basis, compensation in the range of 0% to 100% of the tandem rate. This rate shall prospectively apply to all traffic terminated on the terminating carrier's network, *i.e.*, traffic occurring before and after the 3:1 ratio; 5) SWBT may charge full tandem-served rate for traffic delivered to its tandems; 6) billing will be based on terminating records where available, and where not available, the terminating carrier will use a method agreed to by the parties; and 7) compensation is not due for FX-like traffic, or 8YY traffic.

DIGITAL SUBSCRIBER LINE SERVICE (DSL)

One of the stated goals of the FTA and the Texas Legislature is to foster availability of advanced services to all customers. One technology for providing advanced services is DSL. In an arbitration proceeding, the Commission established the terms and conditions for competitors to have access to SWBT network components necessary for them to offer competitive DSL. The award, issued in late 1999, together with an FCC decision to allow collocation of equipment in incumbent's offices was critical to making DSL available as a competitive offering.

LINE SHARING

In another precedential arbitration, the Commission determined that competing carriers may provide some DSL services to the same customer on the same copper loop facility used by the ILEC to provide voice telephone service to that customer. This technological advance is possible because some DSL services operate on separate and higher frequencies of the electromagnetic spectrum than voice services. In recognition of this fact, the FCC declared the high frequency portion of the loop to be an unbundled network element under FTA §251(c)(3). The arbitrator issued an order in June 2000 on the interim rates, terms and conditions. The Commission is currently arbitrating the rates, terms and conditions under which DSL providers may access the high frequency portion of the loop UNE on SWBT's and Verizon's networks.

RURAL EXEMPTION FROM FTA SECTION 251 INTERCONNECTION REQUIREMENTS

Nearly all of the smaller ILECs in Texas are exempt from the FTA's interconnection requirements. As stated in FTA § 251(f)(1)(A), the requirements do not apply to a rural ILEC until it has received a bona fide request from a competitor and the state commission determines that the request should be granted. Most of the smaller ILECs in Texas qualify for this exemption under one or more of the following criteria: (1) the company serves fewer than 50,000 access lines; (2) it serves incorporated areas of fewer than 10,000 inhabitants; (3) it serves a study area of under 100,000 access lines; or (4) it has under 15 percent of its access lines in communities of more than 50,000 as of February 8, 1996, when the FTA was enacted. This exemption means entry into a number of areas of Texas can involve extra difficulties and therefore is a barrier to the development of competition in rural areas of Texas.

³³ FTA § 3(a)(47). FTA § 251(f)(2) also allows a LEC with less than two percent of the nation's access lines to petition the state commission for suspension or modification of the requirements of FTA § 251(b)-(c). In addition, PURA § 60.004 exempts ILECs with fewer than 31,000 access lines in Texas from having to comply with certain competitive safeguards dealing with unbundling, resale, and interconnection unless a certificated competitor submits a bona fide request to the ILEC.

<u>Senate Bill 560 – Pricing and Packaging Flexibility</u>

Senate Bill 560 (SB 560)³⁴ grants large ILECs new pricing and packaging flexibility and introduces new customer service protections. SB 560 placed the services offered by certain ILECs into two categories, including basic network services and nonbasic services, capped rates for certain services, extended incentive regulation for electing companies,³⁵ reduced in-state long distance access charges, required easy-to-read bill formats and established customer protection rules.

Pricing flexibility is an important benefit to ILECS as customer choice and competition develop in the market. Pricing flexibility includes customer specific contracts, volume, term or discount pricing, zone density pricing, and other forms of promotional pricing.

The Commission adopted extensive new rules to implement the pricing provisions of SB 560. The new rules:

- Establish pricing standards for flexible pricing of services, including individual services and packages of services;
- Give ILECs guidelines for the introduction of customer-specific contract pricing;
- Provide incentives for electing companies to introduce new, innovative services by expediting the process for such introduction;
- Implement competitive safeguards to protect competitors from anticompetitive practices that might result from packaging regulated services with unregulated services, particularly unregulated services provided by an affiliate of an ILEC;
- Require that a service be priced above its long run incremental cost;
- Provide a procedure for establishing the long run incremental cost of a service offered by small ILECs;
- Establish guidelines for separately tariffing services that are offered as part of a package; and
- Provide guidelines to implement certain rate increases requested by an ILEC.

Under SB 560, ILECs must give the Commission ten days notice before changing their prices. This notice offers customers, competitors and the Commission an opportunity to comment on the actions taken by the ILEC. The Commission staff evaluates all such notices. The price of a service must be above the long run incremental

³⁴ Senate Bill 560, 1999 R.S., was authored by Senators David Sibley and Troy Fraser and Representatives Toby Goodman and Leticia Van de Putte.

³⁵ Electing companies are companies that elect incentive regulation pursuant to Chapter 58 of PURA (SWBT and Verizon) or Chapter 59 of PURA (Sprint/Centel, Sprint/United, Century of San Marcos, TXU Telecommunications, Sugar Land Telephone Company, Valor Communications, and Fort Bend Telephone Company).

cost of providing the service. If prices are above their long run incremental cost, they are presumed not to be predatory. The Commission received more than 200 such notices from September 1, 1999 to August 31, 2000. In the same time period, only four complaints have been filed with respect to the new price/service notices.

Senate Bill 86 – Customer Protection Standards

Implementation Process

As directed by Senate Bill 86³⁶ (SB86) from the 76th Texas Legislature, the Commission rewrote its existing customer protection rules to complement the new, competitive environment. Key issues addressed were:

- (1) the applicability of rules to dominant and non-dominant certificated telecommunications utilities:
- (2) emerging issues, such as failure of non-dominant providers to release lines;
- (3) discrimination protections;
- (4) prohibition of fraudulent, unfair, misleading, deceptive, and anti-competitive practices; and
- (5) information disclosures.

Dominant certificated telecommunications utilities proposed, with the support of consumer groups, that the customer service and protection rules apply equally to all certificated telecommunications utilities, on the theory that uniform rules encourage reluctant customers to participate in the market.

Non-dominant certificated telecommunications utilities favored bifurcated rules with less restrictive requirements for themselves, on the basis that uniform standards would create substantial burdens and costs for non-dominant carriers, thus inhibiting competition.

The Commission adopted rules to provide strong protections for all customers, while allowing flexibility for non-dominant certificated telecommunications utilities to encourage increased competition. This approach reflected a belief that informed customer choice is essential to ensure that a highly competitive local telecommunications market will benefit all customers.

Slamming

The Commission continues to take a strong stance in combating slamming by strengthening its anti-slamming substantive rules, continuing to thoroughly investigate each slamming complaint, and taking enforcement action on slamming violators.³⁷

³⁶ Senate Bill 86, 1999 R.S., was authored by Senator Jane Nelson and Representative Debra Danburg.

³⁷ Slamming occurs when a telephone customer finds that his/her telephone service provider has been changed without his/her consent.

Slamming distorts the competitive telecommunications market because it rewards a company that changes customers' telephone services without their approval, unfairly increasing its customer base at the expense of companies that market in a lawful manner. Further, it takes the freedom of economic choice away from the customer. Customers often choose goods and services based upon cost and company reputation. Slamming removes such decision-making from the customer through fraudulent means.

The PUC modified its Substantive Rules to implement SB 86. The amendment to P.U.C. SUBST. R. § 26.130 (1) eliminates the distinction between carrier-initiated and customer-initiated changes, (2) eliminates the information package mailing (negative option) as a verification method, (3) absolves the customer of any liability for charges incurred during the first 30 days after an unauthorized telecommunications utility change, (4) prohibits deceptive or fraudulent practices, (5) requires consistency with applicable federal laws and rules, and (6) addresses the related issue of preferred telecommunications utility freezes.

Slamming complaints received by the Commission declined 52% from their Fiscal Year 1999 level to a total of 1952 complaints in Fiscal Year 2000.

Cramming

On October 21, 2000, the Commission adopted P.U.C. Subst. R. § 26.32, Protection Against Unauthorized Billing Charges ("Cramming"), to implement the provisions concerning unauthorized charges on telephone bills as set forth in SB86. The rule applies to all "billing agents" and "service providers." The rule includes requirements for billing authorized charges, verification requirements, responsibilities of billing telecommunications utilities and service providers for unauthorized charges, customer notice requirements, and compliance and enforcement provisions. The rule ensures protection against cramming without impeding prompt delivery of products and services, minimizes cost and administrative requirements, and ensures consistency with FCC anti-cramming guidelines.

Cramming complaints received by the Commission rose slightly, to a total of 1713 in Fiscal Year 2000.

Other Regulatory Activity

The Commission addressed other competitive market issues, as well. Fairness in costs facing all providers, whether established companies or new entrants, is another aspect of market structure that is essential to local competition, and one with which the Commission was charged with specific implementation duties last session, as follows.

HB 1777 – Uniform Compensation Method for use of Municipal Rights of Way

Telecommunications companies should find it easier to enter new markets in Texas now that the calculation of city franchise fees for use of municipal rights-of-way

are uniform statewide. With the passage of HB 1777,³⁸ the 76th legislature took a new step to level franchise fees within each city in Texas and thereby help stimulate competition in the telecommunications industry. The legislature charged the Commission with implementation of the bill.

Historically, telecommunications companies have paid franchise fees to cities for the use of public rights-of-ways based upon individually negotiated franchise agreements. The majority of those fees were based on a percentage of the telecommunication provider's gross revenues, while others were a flat rate, a per foot charge, or a per line charge. HB 1777 required that the Commission establish rates for each city in Texas, by March 1, 2000, for public right-of-way use based on a fee-per-access line method. The Commission developed rates for about 1110 incorporated municipalities in Texas.

This uniform method to compensate cities for public right-of-way use gives no provider an advantage over another, an important component of a healthy competitive marketplace. It also assures that cities' prior revenue base is protected under the new method. HB 1777 strikes a balance between the interest in ensuring fair and reasonable compensation and the need to encourage competition and reduce barriers to entry by developing a franchise fee methodology that is competitively neutral and non-discriminatory.

Beginning March 1, 2000, franchise fees in Texas have been based on these feeper-access line rates. Each city is compensated by an amount equal to the number of lines by category in a city multiplied by the access line rate (chosen by the city and applied uniformly to every telephone service provider operating in that city) for each category in that city. Rate development took into consideration the number of residential, business and point-to-point customers in each city. Certificated telecommunications providers are required to compensate municipalities four times per year, based upon quarterly access line counts sent by telecommunications providers to the PUC. The commission has assigned an HB 1777 implementation coordinator to assist cities on an ongoing basis. The cities' ongoing work includes updating their access rates through an annual revision mechanism, establishing contacts between cities and providers to ensure fair and timely compensation, and preparing a quarterly line count to verify the accuracy of the compensation.

In the wake of implementing HB 1777 (See Chapter 2 of this Report), parties, including both telecommunications service providers and municipalities, have brought forward several remaining issues for further attention. The commission initiated Project Number 22909 to address the following outstanding issues related to HB 1777 implementation:

- (i) The first issue is the need to distinguish between fees that are solely attributable to the use of Right-of-Way (ROW) (prohibited by HB 1777) versus fees that apply to any entity conducting similar activities within a city.
- (ii) Another pending issue relates to telephone lines that pass through a city but do not provide services or have customers in that particular municipality. Telecommunications providers assert that no compensation should be required for

³⁸ HB 1777 was authored by Rep. Steve Wolens and Sen. Eddie Lucio.

lines that simply pass through a city. Cities contend that pass-through lines are outside of HB 1777 and subject to other compensation. HB1777 measures compensation by end use customers.

- (iii) A third issue relates to compensation requirements for certificated telecommunications providers (CTPs) providing lines that do not meet the definition of "access line" (*i.e.* data or media lines). Cities maintain that compensation is required for the use of right-of-way and, therefore, other lines are subject to other forms of compensation
- (iv) Fourth, a rule suggesting or requiring the existence of a city ordinance regarding right-of-way management issues may be prudent.

Commission staff conducted a discovery workshop and is reviewing briefs as a prelude to a draft rule. The Commission intends to publish the draft rule for comments in January 2001, which would be scheduled for final adoption in March. If the Commission finds that the best resolution for any of these issues would require legislative attention, it will communicate its recommendation to the legislature during the 2001 legislative session.

OTHER DEVELOPMENTS THIS BIENNIUM

Details essential for local competition were worked out in a number of niche market and technical areas, all subject to regulatory parameters. For example, the FCC mandated the implementation and deployment of advanced emergency capabilities of enhanced 911 systems that are generally available to wireline customers (*see* Appendix C). Revisions to rules were necessary to implement legislation pertaining to competition in the payphone industry, which was deregulated by the FCC in 1996 (*see* Appendix D). Activities concerning area codes, number pooling, and N11 prefixes have necessarily continued as the competition environment develops (*see* Appendix E).

Additionally, the Commission took steps to ensure service quality. On April 12, 2000, the Commission adopted P.U.C. SUBST. R. § 2 6.54 relating to *Service Objectives and Performance Benchmarks*. The new rules, effective August 1, 2000, provide for enhancing the current standard for data transmission capability over public switched voice circuits, when connected through an industry standard modem or a facsimile device, to 14.4 Kbps by the end of 2002. The rules provide for enhancing the performance level for certain benchmark measures, including directory assistance, business office, and operator services. Further, installation intervals for service orders have been updated and standards have increased for trouble reports. The enhancements are necessary to ensure that all telecommunications subscribers in Texas receive safe, reliable, and quality service.

In a recent rulemaking, the Commission further opened the local exchange market to competition by requiring building owners to allow competitive providers access to the building to install the equipment necessary to allow tenants to select their preferred telecommunications provider. As a result of this decision, each tenant could have a

different telephone service provider, rather than having one telephone service provider serve an entire building.

The building access rule encourages independent negotiations between the requesting provider and the property owner, and establishes procedures for resolution by the Commission in the event that an agreement cannot be reached. The rule also addresses situations in which the property owner may deny the requesting carrier access to the building for safety concerns or space constraints. The rule was developed in response to informal complaints that some providers had a difficult time accessing tenants in order to promote tenant choice.³⁹

How well is this elaborate framework for competition in the provision of local exchange service working? While many of the details of the framework were determined after the point at which the most recent detailed data are available, the next chapter discusses a variety of indicators of the competitive landscape in Texas.

³⁹ In 1995, the Legislature enacted PURA §§54.259, 54.260, and 54.261 as part of a comprehensive package of legislation to open Texas' telecommunications market to competition. The thrust of these particular PURA sections is to promote competition in the telecommunications market by allowing a tenant under a real estate lease to choose the provider of its telecommunications services. As the competitive marketplace has developed, the need for specific rules to implement these sections has become evident. Prior to 1995, tenants in commercial buildings generally had no choice or limited choice of telecommunications utility, but the 1995 amendments to PURA changed this scheme by providing that tenants be served by the telecommunications utility of their choice. Since that time, the commission has received several informal complaints that certain telecommunications utilities have had a difficult time accessing tenants. Accordingly, the commission initiated this rulemaking proceeding to delineate the terms of access of the telecommunications utility to the property owner's property to serve a requesting tenant.

CHAPTER 3: COMPETITION IN THE LATE 1990s

The time was ripe for market forces to assert themselves in the Texas local telephone service market in the late 1990s. As discussed in Chapters 1 and 2, the Texas Legislature, Congress, and the Commission successfully laid the groundwork for competitive access to local exchange service in Texas over the last several years. This chapter examines how CLECs responded to this new opportunity.

As of December 31, 2000, a total of 432 carriers had been granted COAs or SPCOAs from the Commission. A company that obtains either of these certificates is considered a competitive local exchange company (CLEC). Qualifying for and obtaining either certificate is the minimum action that every CLEC must take to be allowed to provide local exchange service in Texas. While 311 of the carriers currently certificated to provide competitive local exchange service in Texas obtained their certificates by December 31, 1999, the period for which the Commission requested operations data for this report, many of these CLECs did not yet have customers. Many other CLECs were small with limited financial resources, so a simple review of the number of CLECs in Texas does not give a complete picture of the competitive choices available to customers in various geographic regions of the state.

This chapter presents snapshots of the statewide market penetration of CLECs in the late 1990s and discusses the factors involved in competitive local exchange service across the various regions of Texas. A data collection instrument was designed to capture the different means of entering the service territories of ILECs: reselling telephone services, leasing UNEs, or building new plant and equipment. The Commission's ability to collect data for this report from telecommunications providers in the emerging competitive market was limited due to increasing concern among providers about the confidentiality of competitively sensitive information. To obtain information from providers for this report, the Commission allowed for aggregation of data among providers and across regional areas, which limits the extent to which analysis can be achieved. Appendix H discusses the data collection instrument and the information it requested from ILECs and CLECs.

In order to capture the spread of competition across the various areas of Texas, the Commission developed a data collection instrument that would capture the

⁴⁰ A recent Attorney General letter ruling and other judicial decisions and legislative changes have heightened the reluctance on the part of private companies to provide confidential information to public agencies. The fact that the Commission received data replies from only 128 of the 311 companies certificated to provide service during the period in question is attributable in significant part to the concerns about the confidentiality of data. These concerns, and the Commission's interest, are discussed in Legislative Recommendation No. 2 in Chapter 7 of this report.

differences in the market penetration of CLECs between urban and rural areas of Texas and highlight any differences within Rural Texas. ⁴¹ Because Texas is a very diverse state, CLECs will not be entering all markets with the same vigor. The data show that CLECs focused on the Large Metro and Suburban areas of Texas in 1998 and 1999.

Availability of Local Service Competitors

There are a number of perspectives from which to evaluate the availability of competitive providers for local exchange service. Each vantage point has its limits, but together they offer a comprehensive view.

Texas: More Competitors than Other States

At the end of 1999, Texas tied with only New York to lead the nation in number of providers, according to the FCC report, *Local Telephone Competition in the New Millennium.* ⁴² The FCC based its analysis on information reported by ILECs and CLECs (only those carriers serving at least 10,000 lines in a state were required to report). The state-by-state comparison is shown in Table 1. Texas and New York had at least 21 CLECs providing service, while most states reported fewer than ten CLECs.

⁴¹ Commission staff designed the categories of data requested to show the level and growth of competition in 69 areas of Texas distinguished by level of population and geographic location. A socioeconomic profile of the various regions of Texas used for the analysis of the data in this report can be found in Appendix I.

⁴² Local Telephone Competition in the New Millennium, Federal Communications Commission, Common Carrier Bureau, Industry Analysis Division, August 2000.

Table 1 - Number of Reporting Local Exchange Carriers: Year-End 1999

State	ILECs	CLECs	Total
Alabama	9	4	13
Alaska	4	2	6
Arizona	2	8	10
Arkansas	5	1	6
California	9	17	26
Colorado	4	7	11
Connecticut	2	5	7
Delaware	1	1	2
District of Columbia	1	5	6
Florida	8	17	25
Georgia	15	13	28
Hawaii	1	2	3
Idaho	3	0	3
Illinois	6	13	19
Indiana	7	7	14
lowa	6	3	9
Kansas	5	2	7
Kentucky	12	4	16
Louisiana	5	6	11
Maine	5	2	7
Maryland	1	4	5
Massachusetts	1	9	10
Michigan	6	5	11
Minnesota	17	10	27
Mississippi	4	4	8
Missouri	6	5	11
Montana	7	2	9
Nebraska	6	1	7
Nevada	5	3	8
	5	2	7
New Hampshire	3		
New Jersey		8	11
New Mexico	3	2	5
New York	9	21	30
North Carolina	14	8	22
North Dakota	7	2	9
Ohio	9	10	19
Oklahoma	9	2	11
Oregon	8	6	14
Pennsylvania	11	13	24
Puerto Rico	1	0	1
Rhode Island	1	1	2
South Carolina	14	1	15
South Dakota	6	2	8
Tennessee	14	7	21
TEXAS	15	21	36
Utah	3	2	5
Vermont	4	1	5
Virginia	7	7	14
Washington	9	9	18
West Virginia	2	1	3
Wisconsin	10	8	18
Wyoming	2	1	3
Nationwide - Total without duplication	** 168	81	249

^{*} Each report represents all of a company's operations in a given state. Carriers with both ILEC and CLEC operations in the same state provide separate reports.

^{**}Not column totals; numbers represent total number of carriers nationwide (some operate in more than one state).

NUMBERS OF COMPETITORS BY CITY

The HB 1777 Data Collection Instrument

The Commission has available a new source of data that is precise in comparing the actual number of choices for similar service a customer has in a given locale. These data are that which must be reported by cities on a quarterly basis in order to comply with HB 1777 (relating to a uniform method for compensating municipalities for obtaining right-of-way access). This data set reveals which providers are providing service in a given Texas municipality in the following service category groupings:

- Residential Services: analog and/or digital residential switched access lines, including point-to-point private lines, whether residential or non-residential, only to the extent such lines provide burglar alarm or other similar security services.
- **Business Services**: analog and digital non-residential switched access lines.
- **Point-to-point** (**Data**) **Services**: all other point-to-point private lines, whether residential or non-residential, that are not otherwise included within the residential service category.

For the purposes of complying with HB 1777, a telecommunications provider must report the number of lines it provides in each of the three categories above in each city it serves. The basis for counting the number of choices customers have in a given city for purposes of creating the maps in Figures 1-3 was to count the number of providers reporting the above data in that city. In other words, a provider reporting that it provides some services in the residential services category to at least some lines in a town is assumed to be one of the total number of providers operating in that town. The data reported from 1,222 cities supply the data points that are used to make each map.

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⁴³ Loc. Gov't. Code Ann. §§ 283.001-283.058 (Vernon 1999 and Supp. 2000).

Geographic Distribution of Providers, by Type of Service

Residential Services

In Figure 1, which maps CLECs that offer residential services, note that all small circles, or "zeroes," indicate town locations where there is no choice available for an alternative provider of residential services. The open triangles indicate towns where there is a small range of choices available. The gray shaded areas indicate towns where the number of providers is sufficient to offer a chance of competitive choice. The black circles indicate towns where there is an abundant choice of providers for residential services. As the map indicates, competition has clustered in population centers and in East Texas.

Business Services

An examination of the corresponding data for business in Figure 2 shows that the competition clusters in similar areas, but the providers are not as numerous.

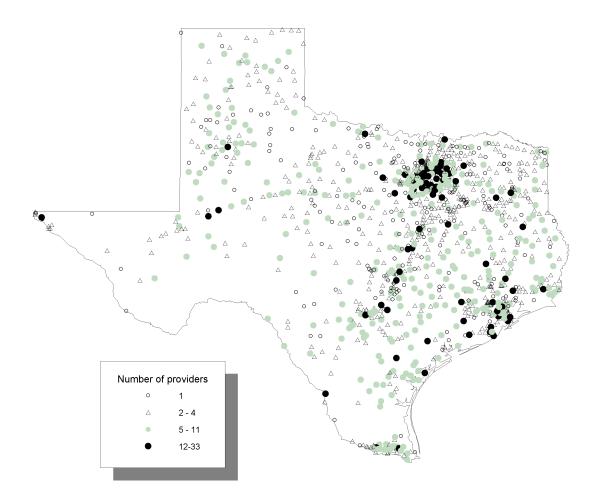
Point-to-Point Services

Data services, though not a big part of the telecommunications market in the past, will be increasingly important to telecommunications providers and customers. According to a study by J. P. Morgan Securities, data services nationwide will grow from \$31.4 million in 1999 to a projected \$90.9 million in 2005. The demand for data services likely will be centered in high-density, higher income areas of Texas, where many CLECs have focused their efforts in the past two years, as shown in Figure 3.

The results of the HB 1777 data collection instrument show that customers have a good selection of data services providers in Houston, Dallas, Austin, San Antonio and, to a lesser extent, East Texas.

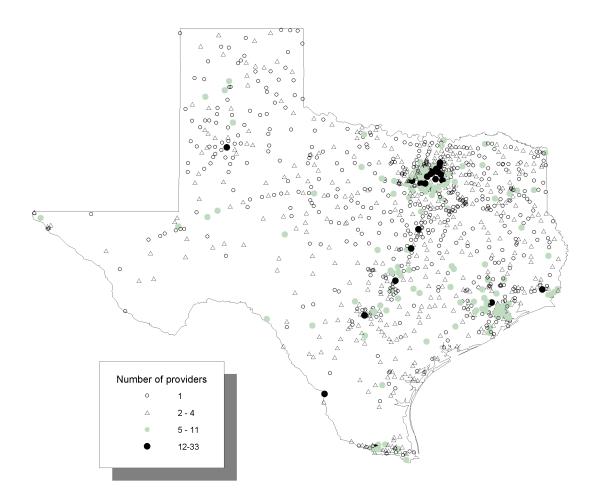
⁴⁴ J. P. Morgan Securities, *Industry Analysis: Telecom Services*, at 4 (Sept. 8, 2000).

Figure 1 – Residential Service Providers



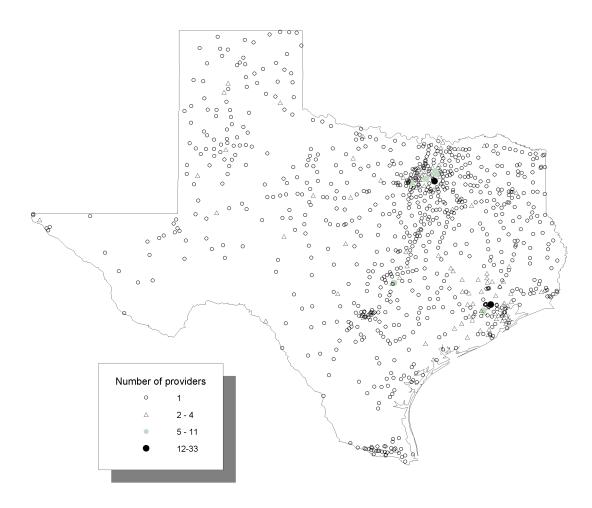
Source: Public Utility Commission HB 1777 Data Collection Instrument

Figure 2 – Business Service Providers



Source: Public Utility Commission HB 1777 Data Collection Instrument

Figure 3 – Data Service Providers



Source: Public Utility Commission HB 1777 Data Collection Instrument

Analysis of the Histogram Data

The histogram data that supported the above figures is shown in the table below and reveals a few more insights.

Table 2 – Number of Providers for Texas Towns

Number of providers in a given town	Number of Texas towns with that many providers, by type of service						
	Residential Services	Business Services	Data Services				
1	257	554	843				
2	229	273	77				
3	178	133	27				
4	143	65	3				
5	92	43	3				
6	58	30	0				
7	53	23	3				
8	42	8	0				
9	30	12	1				
10	32	11	0				
11	25	7	0				
12	18	9	1				
13	14	4	1				
14	12	1	0				
15-19	29	5	0				
20 or more	10	5	0				

Source: Public Utility Commission of Texas HB 1777 Data Collection Instrument

This data set shows that residents in a good number of cities have a very sizeable number of choices of CLECs. Data show that ten cities have twenty or more CLECs serving residential customers, and residential customers in 130 towns and cities have ten to nineteen CLECs from which to choose. In contrast, residential customers in 257 towns⁴⁵ have no CLECs, and another 407 towns have only one or two CLECs from which to choose.

The trend of limited choice in providers for more specialized services can be seen in the point-to-point data. Ninety percent of all municipalities surveyed do not have competition in data services. Residents in 263 cities have no certificated providers of data services. Residents in 843 towns (69 percent of all municipalities surveyed) only have one choice of provider for such services, while residents in 104 towns have a choice of two or three providers for these services.

⁴⁵ This table is based on the same 1222 data points that were the basis for the maps. However, an additional 209 cities reported data to the Commission that did not have the necessary census codes to be included in the map, and therefore are not included in the map data set. Most of them had only ILEC service available and no choice of CLECs for any of the service types.

⁴⁶ There may be providers offering point to point data services that are not required to report to the Commission because the reporting requirement is made only of certificated providers, and it is not technically necessary to obtain a certificate from the Commission in order to provision point-to-point services.

CLECS IN TEXAS BY METRO SIZE AND GEOGRAPHIC REGION

Another measure of geographic availability may be seen in the responses of the CLECs that responded to the data request for this report. Table 3 shows the number of competitive local carriers that are providing service to customers in each of the geographic areas.

Factors of population growth, economic growth, and population density appear to be important in the decisions of CLECs to invest in or resell voice telephony facilities in a given area of Texas, as a sizeable number of competitors are available to Texas residents in counties with populations over 100,000. The Large Metropolitan areas, which comprise nearly half of the Texas population and have high population densities, have by far the heaviest concentrations of CLECs. The Suburban and Small and Medium Metro counties have about the same numbers of choices in providers as each other, even though the former group has twice the population.

Even in the smallest Rural counties, the responses show that at least one competitive provider is available to at least one county in that Council of Government. Many Rural areas have two, three, or more CLECs in addition to an ILEC. Some of these Rural competitors, however, may be aimed at customers with poor credit histories and are not vying for the average local customer's business.

Table 3 – CLECs in Texas by Size and Region

Regional Group	Population Category	Number of CLECs (1999)
Large Metro (Group 1)	Over 600,000	40
Suburban (Group 2)	Near Metros	22
Small and Medium Metro (Group3)	Other Over 100,000	23
Alamo Area Council of Governments	20,001-100,000	10
Ark-Tex Council of Governments	20,001-100,000	7
Brazos Valley Council of Governments	20,001-100,000	8
Capital Area Planning Council	20,001-100,000	7
Central Texas Council of Governments	20,001-100,000	8
Coastal Bend Council of Governments	20,001-100,000	6
Deep East Texas Council of Governments	20,001-100,000	7
East Texas Council of Governments	20,001-100,000	7
Golden Crescent Regional Planning Commission	20,001-100,000	7
Heart of Texas Council of Governments	20,001-100,000	6
Houston-Galveston Area Council	20,001-100,000	10
Middle Rio Grande Development Council	20,001-100,000	7
North Central Texas Council of Governments	20,001-100,000	, 10
Panhandle Regional Planning Commission	20,001-100,000	6
Permian Basin Regional Planning Commission	20,001-100,000	5
South Plains Association of Governments	20,001-100,000	6
South Texas Development Council	20,001-100,000	4
Texoma Council of Governments	20,001-100,000	7
West Central Texas Council of Governments	20,001-100,000	5
Alamo Area Council of Governments	5,001-100,000	6
Ark-Tex Council of Governments	5,001-20,000	4
Brazos Valley Council of Governments	5,001-20,000	5
Capital Area Planning Council	5,001-20,000	5
Central Texas Council of Governments	5,001-20,000	6
Coastal Bend Council of Governments	5,001-20,000	7
Concho Valley Council of Governments	5,001-20,000	4
Deep East Texas Council of Governments	5,001-20,000	7
East Texas Council of Governments	5,001-20,000	6
Golden Crescent Regional Planning Commission	5,001-20,000	7
Heart of Texas Council of Governments	5,001-20,000	8
Houston-Galveston Area Council	5,001-20,000	8
Middle Rio Grande Development Council	5,001-20,000	4
North Central Texas Council of Governments	5,001-20,000	6
North Texas Regional Planning Commission	5,001-20,000	7
Panhandle Regional Planning Commission	5,001-20,000	7
Permian Basin Regional Planning Commission	5,001-20,000	7
Rio Grande Council of Governments	5,001-20,000	3
South Plains Association of Governments	5,001-20,000	6
South Texas Development Council	5,001-20,000	5
West Central Texas Council of Governments	5,001-20,000	8
Ark-Tex Council of Governments	1-5,000	3
Central Texas Council of Governments	1-5,000	4
Coastal Bend Council of Governments	1-5,000	3
Concho Valley Council of Governments	1-5,000	7
Middle Rio Grande Development Council	1-5,000	6
North Texas Regional Planning Commission	1-5,000	6
Panhandle Regional Planning Commission	1-5,000	9
Permian Basin Regional Planning Commission	1-5,000	5
Rio Grande Council of Governments	1-5,000	4
South Plains Association of Governments	1-5,000	5
South Texas Development Council	1-5,000	2
West Central Texas Council of Governments	1-5,000	6
VVEST CERTIFIC TEXAS COUNTING OF GOVERNMENTS	1-0,000	

NUMBERING CODE INDICATORS OF COMPETITORS

One measure of competitive availability can be found in the numbering prefixes (NXX codes) acquired by competitive carriers. Numbering codes are used to route and rate the switched telephone traffic within the nationwide network and ensure that a call is delivered to the telephone switch serving the customer being called. According to FCC data, Texas had 80 local service competitors holding numbering codes in mid-2000, up from 32 local service competitors in mid-1999. Those codes were geographically dispersed within Texas LATAs, as shown in Table 4.

Table 4 – Local Service Competitors by LATA

LATA	4th Qtr 1997	4th Qtr 1998	2 nd Qtr 1999	3 rd Qtr 2000
Abilene	0	1	1	6
Amarillo	2	4	4	10
Austin	9	13	13	29
Beaumont	0	1	2	8
Brownsville	0	1	1	7
Corpus Christi	2	4	5	8
Dallas	14	25	24	48
El Paso	1	3	3	5
Hearne	0	1	1	4
Houston	13	19	19	43
Longview	1	2	3	9
Lubbock	0	3	4	8
Midland	0	1	1	4
San Angelo	0	1	1	3
San Antonio	8	11	11	28
Waco	1	3	3	8
Wichita Falls	0	1	1	6

Sources: Local Competition: August 1999, Federal Communications Commission, Industry Analysis Division, Common Carrier Bureau; Analysis of Local Exchange Routing Guide.

The largest four metro areas in Texas have been the favorite destinations of CLECs. Dallas and Houston had between 40 and 50 CLECs in their markets, and Austin and San Antonio had about almost 30 CLECs in their markets. El Paso, despite being a Large Metro area, had only five CLECs in its market, fewer than cities such as Beaumont, Longview, or Waco, which have a fraction of El Paso's population. Lower *per capita* income and mediocre business prospects might be responsible for this lack of interest in El Paso. The data indicate that a large number of CLECs burst onto the scene in 1998 and again in the first half of 2000.

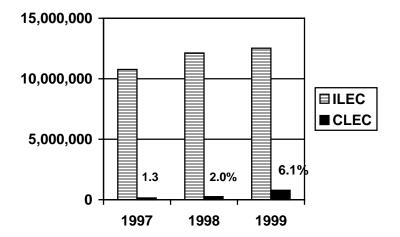
Market Penetration by Competitive Providers

Fifty-nine ILECs responded to the Commission's data request. Out of the 311 CLECs certificated to provide service in Texas during at least some part of the 1998-1999 calendar period, 128 responded to the Commission's data request. Of the CLECs responding, 36 indicated that they were not providing any local exchange services during the period in question. The data in this analysis therefore represent the reporting of 92 CLECs providing local exchange services in Texas at year-end 1999. Not all of these carriers provided services in 1998.

CLEC Access Lines and Revenues

Texas has seen the beginnings of competition in local exchange service, shown by the growth in the number of lines and the revenues for CLECs. Starting from a very low level, CLECs have been increasing market share in Texas in the past three years. Market share of CLECs for access lines rose from 1.3 percent in 1997 to 6.1 percent in 1999, and in revenues the market share for CLECs rose from 1.6 percent to 9.0 percent.

Figure 4 - Number of Lines Provided by ILECs and CLECs



do not appear to be precise. In some instances, it is clear that the CLECs provided incomplete or incorrect information in their geographic reporting. Secondly, the method of aggregating the data may lead to an invalid conclusion concerning competition throughout the entire aggregated region, and any analysis must recognize that telephone exchanges were merged into counties, and counties into larger groupings, based on size and region. As for the number of CLECs reporting, however, the data set does achieve critical mass. While 183 of the 311 CLECs certificated for at least part of the data period did not report, 65 of those do not have interconnection agreements and can therefore be assumed to not have sizeable operations, if any. Forty-two more of those did not get their interconnection agreement until after June 1999, and can therefore be assumed to not have had sizeable operations before the end of the data period. That leaves 76 CLECs failing to report that potentially had operations in the data period, based on their certification and interconnection agreement dates, while 92 CLECs with operations in the data period did report. Within the data set of 128 CLECs that did respond, 43 CLECs had both their certificates and interconnection agreements in order by end of 3rd quarter 1998, while a total of 76 CLECs had these items in order by 3rd quarter 1999.

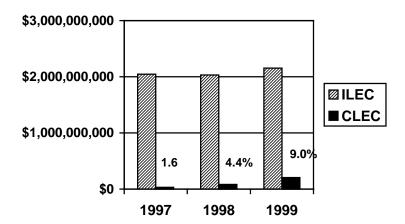
	1997	1998	1999
ILEC Access Lines	10,767,173	12,135,113	12,532,003
CLEC Access Lines	146,185	248,166	810,259
Total Access Lines	10,913,358	12,383,279	13,305,884
CLEC Percentage of Lines	1.3%	2.0%	6.1%
ILEC Local Revenues	\$2,044,664,321	\$2,160,771,998	\$2,287,287,649
CLEC Local Revenues	32,735,793	99,364,239	227,326,666
Total Local Revenues	\$2,077,400,114	\$2,260,136,236	\$2,514,614,315
CLEC Percentage of Revenues	1.6%	4.4%	9.0%

Table 5 – Comparison of ILEC and CLEC Lines and Revenues

Source: 1999 Scope of Competition Report; Data Request 2000 Responses

Similarly, the CLEC share of revenues has more than doubled in 97-98, and doubled again by year-end 1999, as shown in Figure 5.

Figure 5 – Comparison of ILEC and CLEC Local Revenues



Displayed in Table 6 are the number of residential and business lines provided by CLECs, categorized by geography and county size. In terms of lines in 1999, CLECs captured 8.2 percent of the Large Metro market, 11.4 percent of the Suburban market, and 5.3 percent of the market in Medium and Small Metro areas. This table clearly reveals the emergence of local exchange competition, first in the Large Metropolitan areas in 1998, followed by the beginnings of competition in counties with under 100,000 population.

Table 6 - CLEC Lines

County Size	19	98	1999		
	CLEC Lines	% of Total	CLEC Lines	% of Total	
		State Market		State Market	
Large Metro (Group 1)	179,921	3.0	530,393	8.2	
Suburban (Group 2)	27,136	3.1	115,644	11.4	
Small/Medium Metro (Group 3)	25,491	1.4	102,685	5.3	
Rural; 20,001 – 100,000	10,015	0.3	36,359	1.2	
Rural; 5,001 – 20,000	3,712	0.5	14,864	1.9	
Rural; 1 – 5,000	1,891	1.5	10,314	7.6	
Total CLEC	248,166	2.0	810,259	6.1	

While the four largest ILECs in Texas – SWBT, Verizon, Sprint/Centel and Sprint/United – have signed significant numbers of interconnection agreements with competitive carriers under the FTA, the remaining ILECs have entered into relatively few agreements. The agreements involving the smaller ILECs, which would be predominately in Rural areas, are strictly resale agreements, usually with no wholesale discounts. The limited number and extent of these agreements results from two factors: (1) relatively little interest on the part of other carriers to compete in less urbanized areas, and (2) the partial exemption of rural telephone companies from the interconnection requirements of FTA § 251(c).

Table 7 displays the revenues from residential and business customers by ILECs and CLECs, categorized by geography and county size. (For a breakdown of each of the 69 areas listed in the data collection instrument, see Appendix J.) CLECs appeared to be providing higher-value local service in the Large Metro and Suburban areas of Texas than in the state as a whole. In terms of revenues in 1999, CLECs captured 11.7 percent of the Large Metro market, 15.4 percent of the Suburban market, and 5 percent of the market in Medium and Small Metro areas. CLEC revenues comprise less than 4 percent of all revenues by local exchanges in Rural areas.

Table 7 – CLEC Revenues

County Size	1998	1	1999			
	CLEC Revenue	CLEC Revenue % of Total		% of Total		
		State Market		State Market		
Large Metro (Group 1)	56,098,286	4.7	156,742,378	11.7		
Suburban (Group 2)	13,636,940	8.9	27,280,185	15.4		
Small/Med. Metro (Gr. 3)	10,539,058	3.3	17,779,206	5.0		
Rural; 20,001 - 100,000	17,925,710	3.8	22,833,530	4.4		
Rural; 5,001 – 20,000	1,106,643	1.1	2,332,361	2.2		
Rural; 1 – 5,000	57,602	0.4	359,007	2.4		
Total CLEC	99,364,239	4.4	227,326,666	9.0		

Source: Public Utility Commission Data Request 2000 Responses

The FTA envisioned the entry of local exchange competitors through three avenues: facility-based, resale, and the purchase of unbundled network elements (UNEs). Figure 6 shows the manner in which CLECs provided service in Texas in 1998 and 1999. In 1999, CLECs appeared to use each of the three methods of entry in equal proportions.

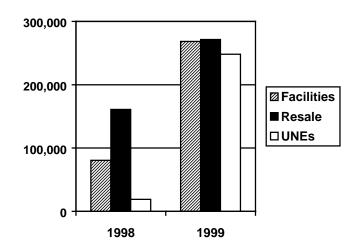


Figure 6 – CLEC Method of Service Provision (Number of Loops)

COMPETITIVE ENTRY INTO TEXAS MARKETS

While CLECs have increased market share statewide, the data showed that CLECs were more successful in gaining market share in Large Metropolitan areas than in small metro or Rural areas. The comparison of the business and residential markets below indicates that CLECs penetrated business markets faster than residential markets in 1998 and 1999.

Business/Residential Comparisons

CLECs have been much more aggressive in gaining market share in local service for businesses than for residential customers. CLECs have twice the number of business lines than residential lines, as shown in Figure 7. While CLECs showed strong growth rates in both markets, by 1999 CLECs had ten percent of the lines that served business customers compared to only three percent of lines that served residential customers, as can be seen in Table 8 and Table 9. CLECs had a six percent market share of residential revenues, indicating that their revenues per residential line were much higher than that of ILECs, as shown in Table 10 and Table 11.

 $\label{thm:comparison} \textbf{Figure 7-Comparison of Residential and Business Telephony Services in Texas \ by \ Local \ Access \ Lines$

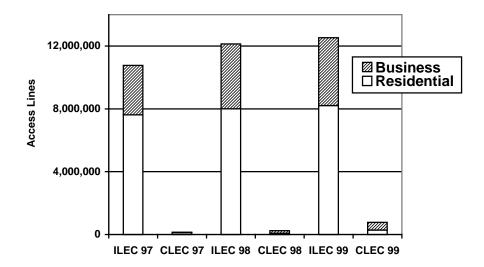


Table 8 – Residential Lines

	1997		1998		1999		
	Lines	%	Lines	%	Lines	%	
ILEC	7,619,269	98.4	8,009,450	99.0	8,216,074	96.7	
CLEC	122,450	1.6	79,114	1.0	280,826	3.3	
Total	7,741,719		8,088,564		8,496,900		

Table 9 – Business Lines

	1997		1998		1999		
	Lines	%	Lines	%	Lines	%	
ILEC	3,147,904	99.3	4,125,663	96.1	4,315,929	89.7	
CLEC	23,735	0.7	169,052	3.9	493,055	10.3	
Total	3,171,639		4,294,715		4,808,984		

Source: Public Utility Commission Data Request 2000 Responses

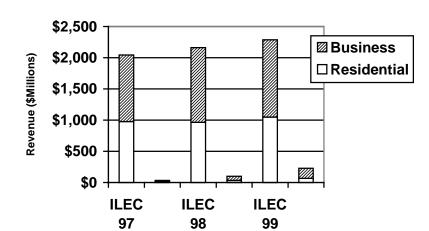


Figure 8 – Comparison of Residential and Business Telephony Services in Texas by Revenues

Table 10 – Residential Revenues

	1997		1998		1999		
	Revenue	%	Revenue	%	Revenue	%	
ILEC	976,178,035	98.5	962,972,235	96.6	1,048,862,155	93.9	
CLEC	14,375,823	1.5	34,019,358	3.4	67,632,535	6.1	
Total	990,553,858		996,991,593		1,116,494,691		

Table 11 - Business Revenues

	1997		1998		1999		
	Revenue	%	Revenue	%	Revenue	%	
ILEC	1,068,486,286	98.3	1,197,799,762	94.8	1,238,425,494	88.6	
CLEC	18,359,970	1.7	65,344,881	5.2	159,694,131	11.4	
Total	1,086,846,256		1,263,144,643		1,398,119,624		

Source: Public Utility Commission Data Request 2000 Responses

Facilities-based CLEC lines were almost exclusively in Large Metro areas. Eighty percent of all facilities-based CLEC lines in Texas served business customers in Large Metro areas, with another 10 percent serving Large Metro residential customers. Resale and UNEs were both popular outside Large Metro areas and with residential customers. See the charts and tables in Figure 9 and Figure 10.

The mix of business and residential customers varies significantly by population of a region. In Large Metro and Suburban areas, CLECs had 70 percent of their lines serving business customers and 30 percent of their lines serving residential customers. Medium and Small Metro areas of Texas saw a roughly 50-50 mix between business and residential lines. In Rural areas, CLECs served only 40,148 customers, with 30 percent of these being business customers and 70 percent being residential customers.

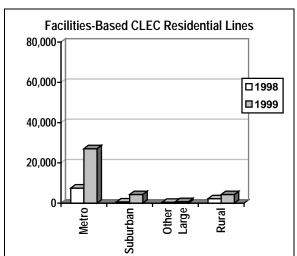
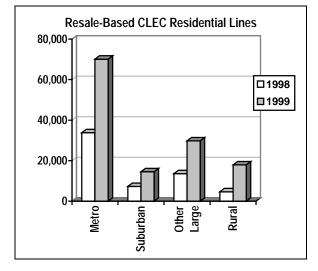
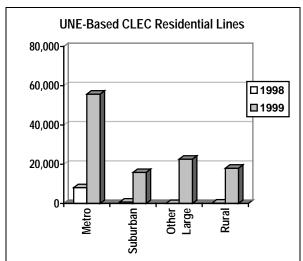


Figure 9 – CLEC Residential Lines by Provision Type and Region





	Facilities		Resale		UNEs		Total	
	1998	1999	1998	1999	1998	1999	1998	1999
Residential – Lines								
Large Metro (Group 1)	7,509	27,052	33,822	70,101	8,067	55,737	49,398	152,890
Suburban (Group 2)	658	4,309	7,240	14,549	713	15,837	8,611	34,695
Small and Medium Metro (Group3)	480	750	13,604	29,758	6	22,585	14,090	53,093
Rural	2,216	4,267	4,600	17,899	199	17,982	7,015	40,148
Total	10,863	36,378	59,266	132,307	8,985	112,141	79,114	280,826

150,000-

100,000-

50,000-

Metro

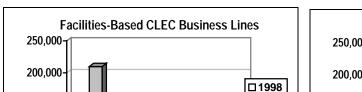
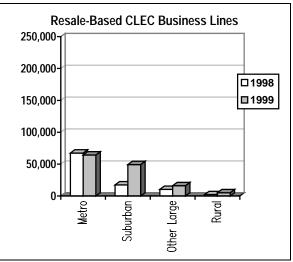
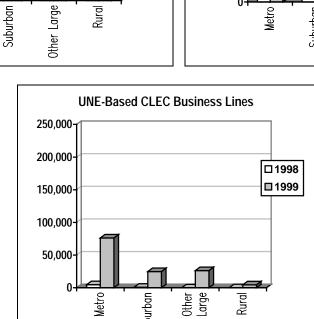


Figure 10 - CLEC Business Lines by Provision Type and Region

Rural

□1999





UNEs **Facilities** Resale Total 1998 1999 1998 1999 1998 1999 1998 1999 **Business - Lines** Large Metro (Group 1) 58,303 209,837 67,427 64,324 4,793 76,290 130,523 350,451 Suburban (Group 2) 32 2,537 17,560 49,306 933 24,797 18,525 76,640 16,239 48,842 Small and Medium Metro (Group3) 1,020 6,252 10,377 4 26,351 11,401 Rural 6,108 7,403 2,281 5,155 214 4,564 8,603 17,122 65,463 226,029 97,645 132,002 169,052 493,055 Total 135,024 5,944

Source: Public Utility Commission Data Request 2000 Responses

Retail Prices and Cross Subsidies

In 1998 and 1999, the business sector attracted telecommunications competition at a far greater rate than the residential sector. Entrants, seeking the larger revenue streams, flocked into high subscriber-density areas rather than into low-density areas. This phenomenon, described by incumbents as "cream-skimming," is hardly surprising given the economics and the status of current telecommunications regulation.

Regulation tends to encourage "cream-skimming" by imposing cross-subsidies. The current retail rate structure contains implicit subsidies designed to achieve universal service. To subsidize basic services, regulators allow the telecommunications industry to assess a high mark-up on vertical services. Business services typically have tariffed retail rates set at a much higher level than their costs to subsidize residential services. Urban customers tend to pay rates that are above cost, while rural customers tend to pay rates that are below cost. ⁴⁹

The practice of imposing cross-subsidies is incompatible with the goal of promoting fair competition (*i.e.*, based on real economic costs) via the construction of new facilities by new competitors. Cross subsidies also are inconsistent with fair competition via the purchase of UNEs, especially when the TELRIC-based pricing for UNEs is based on regional differences, rather than by customer class. Specifically, cross-subsidy regulation imposing retail prices inconsistent with the associated UNE rates encourages competitors into UNE-based "cream skimming" for services with overly high retail prices, and unduly discourages competitors from UNE-based provision for services that are under-priced.

In Texas, competitors can, under certain circumstances, take advantage of cross-subsidy regulation to offer service to business customers in high-density areas for a better rate than the ILEC can offer. The sum of TELRIC-based UNE rates for business services in urban areas is often less than the tariffed retail prices charged by the ILEC, which contain implicit subsidies for residential telephone service. Therefore, if a competitor's retailing costs plus the sum of UNE rates owed to the ILEC is below the ILEC's tariffed retail price, the competitor can turn a profit by purchasing a business phone's underlying UNEs, allowing it to offer various optional calling features at a total rate below the ILEC's retail price. This opportunity is reinforced when the targeted customers spend relatively large amounts on long distance and other optional services without causing the competitor to incur substantial additional costs.

⁴⁸ Actually, it is the flat-rated *access* to the telephone network (and hence to all services) via the customer's "local loop" that tends to be subsidized.

⁴⁹ Some of these cross-subsidies were diminished in the Commission's universal-service project (*Compliance Proceeding for Implementation of the Texas High Cost Universal Service Plan*, Project No. 18515), which provided for larger-scale, more systematic subsidies to providers serving customers in high-cost areas by means of a substantially increased Texas Universal Service Fund surcharge assessed on all taxable telecommunications receipts.

⁵⁰ David Sibley, Declaration for SWBT in *Interim Process for New Services and Promotional Offerings, and Pricing and Packaging Flexibility Tariffs, Pursuant to PURA Chapters 52, 58, and 59,* Project 20956, (Oct. 21, 1999).

On the other hand, providing services using UNEs to residential customers (at least those who use long-distance sparingly and purchase few if any optional services) may not be profitable for competitors because the revenue the competitors can recover from the retail rate could be below the sum of the UNE rates needed to provide such service. Consequently, competitors are much less likely to provide UNE-based service to such residential customers.⁵¹

This inconsistency of retail rates and UNE rates for residential and business is illustrated below.⁵²

Resale Price
- Business

Sum of TELRIC elements

Loss resulting from TELRIC pricing

Figure 11 – TELRIC-based UNE Rates vs. Retail Rates

Long Distance Competition

Although Texans enjoyed a wide selection of long distance carriers (also known as interexchange carriers, or IXCs) at the end of 1999,⁵³ the long distance market continued to be dominated by three carriers: AT&T, WorldCom (which merged with MCI in September 1998), and Sprint. Economists refer to this phenomenon as a "tight oligopoly," meaning that the dominant competitors possess a level of market power that enables them to use significant discretion in setting prices. A market may be considered a "tight oligopoly" if its four largest firms serve at least 60% of the market. In 1999, the

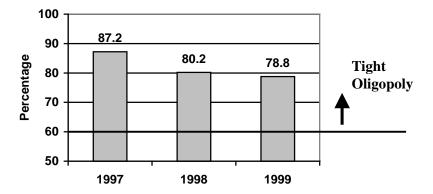
⁵¹ The ability to resell the ILEC's services at a discount offers an additional avenue for competitors to provide service. The availability of universal-service subsidies for providing facilities- or UNE-based service to customers in high-cost areas also provides an incentive for competitors to serve some customers in less urbanized areas.

⁵² David Sibley, Declaration for SWBT in *Interim Process for New Services and Promotional Offerings, and Pricing and Packaging Flexibility Tariffs, Pursuant to PURA Chapters 52, 58, and 59,* Project 20956, at 6 (Oct. 21, 1999).

⁵³ As of September 2000, 1550 long-distance carriers were registered with the Public Utility Commission of Texas. The commission's list of registered long-distance carriers can be found at http://www.puc.state.tx.us/telecomm/directories/ixc.xls.

market share in Texas of the largest three IXCs was 78.8% compared to 80.2% in 1997 and 87.2% in 1995 for the same three firms.⁵⁴

Figure 12 – Long Distance Market Share of AT&T, WorldCom, and Sprint Combined



Another widely recognized measure of market power is the Hirschman-Herfindahl index (HHI).⁵⁵ This index ranges from a theoretical minimum of just above zero (meaning no firm has a meaningful market share) to a maximum of 10,000 (meaning a complete monopoly exists). An HHI at or above 1,800 indicates that a market is tightly oligopolistic, *i.e.*, highly concentrated. While the HHI was 3,370 in 1995 and 2,724 in 1997, it declined to 2,497 in 1999.⁵⁶ The last HHI suggests that the Texas intrastate long distance market was still highly concentrated at the start of 2000, though the market power of the three largest IXCs was continuing to decline.

⁵⁴ These market-share percentages are based on originating access minutes of use. The 1995 and 1997 percentages are for AT&T, MCI, Sprint, and Worldcom combined. The 1999 percentage is for AT&T, Worldcom and Sprint; Worldcom purchased MCI in 1998. Market share also may be measured using revenues, presubscribed lines, customers, or some other measure.

 $^{^{55}}$ The HHI is calculated by summing the squares of each firm's market share expressed as a percentage.

the shares of the top four long-distance carriers in 1995 and 1997 and the top three in 1999. The 1999 estimate was calculated using only access minutes of use purchased from SWBT, Verizon, and the Sprint ILECs. Staff was not able to obtain data on an IXC-specific basis due to the reluctance of companies to provide company-specific data. The problem of obtaining data to calculate the HHI is discussed in Chapter 7 of this *Report*, under Legislative Recommendation No. 3 (*Clarify and Ensure Commission Authority to Protect proprietary Information*) as one of several examples of companies' refusal to provide information due to concerns about the Commission's ability to protect commercially sensitive information.

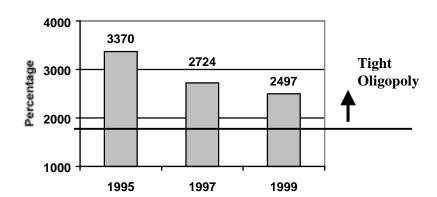


Figure 13 – Hirschman-Herfindahl Index (HHI) of Three Largest Long Distance Carriers (AT&T, WorldCom, and Sprint)

A significant change in the long distance arena occurred on July 10, 2000, when SWBT's affiliate SBC Long Distance entered the interLATA long distance market. The long distance carriers, as of late 2000 SBC Long Distance offered interLATA long-distance service only to SWBT's local exchange telephone customers. Given SBC Long Distance's initial success in attracting long distance customers combined with customer enthusiasm for one-stop shopping, the erosion of the interLATA dominance of AT&T, WorldCom, and Sprint appears to be accelerating. As of December 5, 2000, SBC reported to the Commission that 1.2 million residential customers and more than 300,000 business customers had signed up for its interLATA long distance. The associated access line total represents more than 12% of SWBT's access lines in Texas.

As a result of a restructure of the Texas Universal Service Fund and the implementation of PURA § 58.301, *Switched Access Rate Reduction*, between September 1, 1999, and July 1, 2000, switched access rates charged to IXCs for originating and terminating long distance calls were reduced significantly. The reductions were flowed through to retail customers in the form of lower long distance rates. On average, a standard long distance call that previously was priced at \$.15 - \$.25 per minute of use was decreased to \$.10 to \$.20 per minute of use. Generally, long-distance rates charged by large IXCs were reduced by five cents (\$.05) per minute of use. These reductions memorialized an important goal of the last legislative session – to make certain that retail customers benefited from significant reductions to access charges paid by IXCs.

Conclusion

CLECs entered Texas in large numbers, particularly in Dallas and Houston, which had over 40 CLECs by mid-2000, and in Austin and San Antonio, which each had nearly 30 CLECs. CLECs gained market share in local telephony, particularly in the Large Metro and Suburban areas of those four cities.

⁵⁷ SWBT's entry into the long distance market is discussed in detail in Chapter 2 of this Report.

CLECs had stronger market penetration among business customers than residential customers. CLECs entered Large Metro markets by building infrastructure and entered other regional markets by using a combination of resale of services and purchase of UNEs. Even rural areas of Texas were found to have multiple CLECs, but questions remain as to whether these CLECs serve a small niche market or the broader range of residential customers. Market penetration in rural areas overall was limited but increasing over time.

CHAPTER 4: COMPETITIVE DEVELOPMENTS IN 2000

The data in Chapter 3 show that, in 1998 and 1999, a number of well-financed CLECs appeared poised to provide ILECs with competition for local exchange service in large and Suburban markets in Texas and to slowly but steadily increase market share in Rural areas. In 2000, however, some CLECs fell on hard times, forcing some into bankruptcy, restructuring, and mergers. A number of these CLECs announced plans to reduce their efforts in local voice service in Texas. At the same time, SWBT strengthened its financial position relative to CLECs, gained substantial market share in long distance markets, and raised the prices of various non-competitive telecommunications services.

CLECs

CLECs entered Texas in large numbers in 1998 and 1999. A number of the startups were well financed, and the three largest long-distance carriers had announced their intentions to compete in local voice telephony in Texas. In the past year trends in the stock market and in the telecommunications industry have dramatically changed the dynamics of competition in local service.

FINANCIAL SIZE AND STRENGTH IN THE LATE 1990s

The financial size and strength of CLECs relative to ILECs can influence the quality and intensity of competition in local telephone service in various areas of Texas. While a large number of CLECs have entered the Texas market, if their capitalization is thin or if they are not affiliates or subsidiaries of well-capitalized firms, CLECs may not provide substantial competition to entrenched ILECs, particularly if financing for start-up firms proves difficult.

If a number of CLECs have deep pockets or are affiliates of companies with deep pockets, these firms can fight long and hard for market share if the prospects for solid profits are good. They would be in a position to finance the installation of lines, to purchase long-term contracts for UNEs, to market their services effectively, and to maintain a presence in a local market if the incumbent decided to undercut prices in an attempt to retain market share.

The survey reveals that by the end of 1999, 90 CLECs had entered the Texas market for local exchange service, as shown in Table 12.⁵⁸ The vast majority of CLECs

Due to the Commission's limitations on acquiring competitively sensitive information, the number of CLECs actually providing service to paying customers at the end of 1999 is not known, and

were private companies. Of the remaining CLECs, the survey showed comparable numbers of telephone cooperatives and publicly traded firms. These CLECs were competing with fifty-nine ILECs. Telephone cooperatives and small, private companies accounted for more than 80 percent of the ILECs.

Table 12 - Texas ILECs and CLECs by Type of Organization

		ILECs	CLECs	
Type of Entity	Number	Percent of Total	Number	Percent of Total
Public Companies	10	16.9%	10	11.1%
Private Companies	25	42.4%	72	80.0%
Telephone Cooperatives	24	40.7%	8	8.9%
Total	59	100.0%	90	100.0%

Source: Public Utility Commission Data Request 2000 Responses

Table 13 lists the CLECs by size of their capitalization, defined in this case as the value of debt and equity of the CLEC's parent in its most recent financial statement, which in most cases was year-end 1998 or year-end 1999. Financial data on 52 CLECs were not available for this analysis. Most of these 52 CLECs were private companies, many of which do not publish their financial statements. Most of these firms likely were small with limited financial resources. They may have been niche players, gambling on quick, rapid growth, or eventually merging with another CLEC when the market consolidates.

therefore the percentage of those replying to the Commission's data request cannot be known. Several perspectives are available on the response rate to the Commission's data request and are detailed in Appendix H. Because it is nearly impossible for a CLEC to provide services without an interconnection agreement with an ILEC, the Commission believes that a critical mass of competitive providers submitted data, based on the 73 responses that were received from the 150 companies that had interconnection agreements in place by the end of 1999, which was the close of the period for which data were requested.

⁵⁹ One of the cooperatives, Denton Electric Cooperative, is an electric, not a telephone, cooperative.

⁶⁰ Staff in the Commission's Financial Review section made a determination of which subsidiary of a company was the parent based on financial statements and experience in the industry. Staff did not contact or ask the firm directly for this information, so the Commission does not claim that the identification of the parent companies is exact. Nor did staff make an attempt to determine the market capitalization of the publicly traded companies in this survey. Thus, the figures presented in this analysis should be considered illustrative rather than definitive.

Table 13 – Capitalization of CLECs: Debt and Equity Listed in Financial Statements

Size of CLEC	Number	Percent of Total
More than \$10 billion	10	11.1%
\$1 billion - \$10 billion	11	12.2%
\$100 million - \$1 billion	7	7.8%
Less than \$100 million	10	11.1%
Unknown	52	57.8%
Total	90	100.0%

In 1999 the Texas market had CLECs with a wide range of capitalizations, some of which are very large electric or telephone utilities. Twenty-one firms, or a quarter of all CLECs, had parent companies with \$1 billion or more. Almost 70 percent of all CLECs, however, had less than \$100 million in capitalization or did not publish their financial information.

The two largest ILECs listed were SWBT and GTE/Verizon, ILECs subject to customer choice. These two ILECs each had capitalizations of over \$10 billion, as shown in Table 14. Almost 90 percent of all ILECs in Texas, however, had capitalizations of less than \$100 million. State and federal law and regulations allow small ILECs to forgo the implementation of standard interconnection agreements. This exemption hinders customer choice in many service areas of Rural Texas.

Table 14 – Capitalization of ILECs (Debt and Equity)

Size of ILEC	Number	Percent of Total
More than \$10 billion	2	1.7%
\$1 billion - \$10 billion	1	3.4%
\$100 million - \$1 billion	3	5.1%
Less than \$100 million	50	84.7%
Unknown	3	5.1%
Total	59	100.0%

Source: Public Utility Commission Data Request 2000 Responses

CLECs' Investment in Infrastructure

The flood of financial capital that CLECs had at their disposal in the late 1990s allowed them to be aggressive in investing in new plant and equipment in Texas in 1999, as shown in Table 15 and Table 16. While ILECs had considerable construction expenditures in the late 1990s, many of these expenditures appear to have been offset by depreciation of existing equipment. CLECs, in contrast, increased their construction expenditures in 1999 by more than three times their 1998 expenditures, accounting for

one out of every four dollars of new investment in 1999. As a result, CLECs' share of infrastructure, as measured by net plant investment, doubled in one year to nearly ten percent in 1999.

Table 15 – Net Plant Investment

	1998		1999	
	Net Plant		Net Plant	
	Investment	%	Investment	%
ILEC	13,678,746,833	95.0%	13,849,642,077	90.5%
CLEC	713,529,978	5.0%	1,457,917,966	9.5%
Total	14,392,276,810		15,307,560,043	

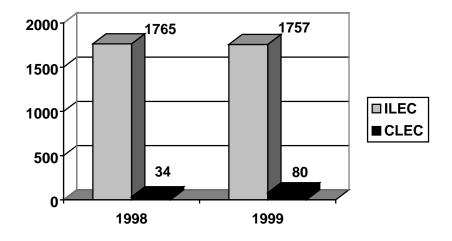
Source: Public Utility Commission Data Request 2000 Responses

Table 16 – Construction Expenditures

	1998		1999	
	Construction		Construction	
	Expenditures	%	Expenditures	%
ILEC	2,396,430,541	90.8%	2,282,189,742	74.0%
CLEC	243,005,792	9.2%	800,765,765	26.0%
Total	2,639,436,333		3,082,955,507	

CLECs also invested in switching offices, as shown in Figure 14. Growth was most rapid in switching offices serving 31,000 or fewer lines. Table 17 shows that CLECs doubled the number of switching offices that served over 300,000 lines from eight in 1998 to sixteen in 1999.

Figure 14 – Comparison of ILEC and CLEC Switching Offices



1998 1999 **ILEC CLEC ILEC** CLEC Size of Switching Office Fewer than 3,000 Lines 928 17 914 45 8 363 3,000 to 31,000 Lines 360 16 31,000 to 100,000 Lines 100 1 103 1 100,000 to 300,000 Lines 42 0 42 2 Over 300,000 Lines 335 8 335 16 34 1,757 **Total Switching Offices** 1,765 80

Table 17 – Comparison of Switching Offices by Size of Office

FINANCIAL STRUGGLES IN 2000

The capitalization of firms in 1998 and 1999, while consistent with the timeframe of the information in the data collection instrument, no longer presents an accurate picture of the financial condition of many CLECs.

The FTA and the increased market penetration of the Internet stimulated substantial investment in the telecommunications industry in the past two years. Capital spending by telecommunications companies in the United States is projected to exceed \$100 billion in 2000, almost three times the level in 1995.⁶¹

According to analysts in the telecommunications industry, investment in telecommunications lines and equipment has greatly outpaced growth in revenues in 1999 and 2000. The American telecommunications industry had a negative cash flow of \$20 billion in the first half of 2000, on top of a negative cash flow of \$11 billion in 1999. 62

The industry turned to capital markets to finance this investment, issuing tens of billions of dollars in stock and bonds. The telecommunications industry became a major source of investment funds. Since year-end 1998, slightly more than 50 percent, or about \$10.3 billion of the \$20 billion private equity firms poured into minority investments in public companies went to telecommunications firms. In 1998 and 1999, telecommunications companies issued over \$50 billion in high-yield bonds. 63

This sharp increase in investment has led to a boom and bust in share prices of CLECs. Table 18 shows the performance of the NASDAQ Telecommunications Index for the period January 1, 1998 to December 5, 2000. The index rose from 306.1 in December 31, 1997 to a peak of 1,230.1 on March 10, 2000. By early 2000 this rise in the stock market provided CLECs with large capitalizations.

10

⁶¹ "One Analyst's Grim Telecommunications View," New York Times (October 5, 2000).

 $^{^{62}}$ Ia

⁶³ "Telecom Sector Has Become a Black Hole for Investors," Wall Street Journal (October 13, 2000).

NASDAQ Cumulative **Telecommunications** Increase from Increase from December Date Index **Previous Period** 31, 1997 December 5, 2000 534.4 -56.6% 74.3% March 10, 2000 1,230.1 21.1% 301.2% 231.2% January 1, 2000 1,015.4 102.7% January 1, 1999 500.9 63.4% 63.4% January 1, 1998 306.6 NA NA

Table 18 – Performance of the NASDAQ Telecommunications Index (January 1, 1998 – December 5, 2000)

Source: National Association of Securities Dealers website, http://www.nasdaq.com, 10/31/00.

According to various reports in the financial press in the fall of 2000, investor sentiment turned sharply negative towards the telecommunications sector when CLECs were unable to convince investors that prevailing and projected profits were large enough to justify the prevailing level of investment and high share prices. In the nine months after its March 2000 peak, the NASDAQ Telecommunications Index fell 57 percent.

In the second half of 2000, CLECs found that access to capital, in the form of bank loans, issuance of debt, or initial public offerings of equity, was much more limited than it had been in the previous 18 months. The spread between telecom high-yield bonds and U.S. Treasuries (the safest debt instrument in the market) rose from 4.72 percent at the beginning of 2000 to 8.26 percent in mid-October, dramatically increasing the cost of raising venture capital for the typical small CLEC.⁶⁴

The fall in the share prices of telecommunications companies strongly impacted some promising CLECs that had entered the Texas market. For example, four CLECs that once had a capitalization listed in Table 13 as \$800 million or more in 1998 or 1999 – Covad, ICG, Rhythms, and Teligent - saw their share prices fall more than 95 percent from their 2000 peaks, as shown in Table 19. In contrast, the stock price of the leading ILEC in Texas, Southwestern Bell, was less than 10 percent off its peak in 2000.

⁶⁴ *Id*.

Table 19 - Fall in Share or Index Prices of Telecommunications Providers in 2000

Category	Peak Price in 2000	Price on December 5, 2000	Percent Change in Stock Price
0 3			
NASDAQ Telecommunications Index	1,230.1	534.4	-56.6%
ILEC			
Southwestern Bell	59.0	53.4	-9.5%
Large CLECs which are Long-			
Distance Carriers			
AT&T	61.0	20.4	-66.6%
Sprint	67.0	23.9	-64.3%
Worldcom	51.9	14.7	-71.7%
Selected Small CLECs			
Allegiance	110.1	17.6	-84.0%
Covad	66.6	1.9	-97.1%
ICG	39.2	0.3	-99.2%
Rhythms	50.0	0.9	-98.2%
Teligent	100.0	3.5	-96.5%

Source: Yahoo! webpage, http://finance.yahoo.com; Wall Street Journal, December 5, 2000

Larger CLECs that are long distance carriers also faced a difficult set of problems in 2000. A significant change in the long distance arena occurred on July 10, 2000, when SWBT's affiliate SBC Long Distance entered the interLATA long distance market. Given SBC Long Distance's initial success in attracting long distance customers, combined with customer enthusiasm for one-stop shopping, the erosion of the interLATA dominance of AT&T, WorldCom, and Sprint appears to be accelerating.

By the end of October 2000, stock prices for the three largest long distance carriers fell by two-thirds from their calendar year 2000 highs. These events led long-distance carriers to reconsider their business strategies in the Texas local telephone market.

CLECS RECONSIDER THE TEXAS MARKET

Table 20 presents a recent snapshot of the actions that key CLECs have taken with regards to the Texas local voice market. Some of these CLECs were the largest, most capitalized CLECs in the Texas in 1998 and 1999 and were considered the "shining examples" of competitors to Texas ILECs for residential customers in Texas

CLEC	Action Taken	Date Announced	Source
AT&T	Reduced presence in residential voice market, focusing on data services. Restructure/divestiture into four separate business.	10/25/00	att.com/press/item/ Seth Schiesel, "AT&T, In Pullback, Will Break Itself Into 4 Businesses," New York Times, 26, Oct. 2000. Floyd Norris, "AT&T Realigns Its Planets," New York Times, Oct. 26, 2000.
Sprint	Reduced presence in residential voice market, focusing on data services.	11/3/00	CNET News.com
Worldcom	Reduced presence in residential voice market, focusing on data services.	11/1/00	2000 Test.newsbytes.com/news/00 "WorldCom to Reorganize, Focus on Internet, Data," <i>Dallas Morning News</i> , Oct. 27, 2000.
Verizon /VSSI	Amend to withdraw local service package. Reduced presence within residential voice market, focusing on data services. Withdrawal of bundled package offerings.	10/20/00	Investor.verizon.com/ news, 30, Oct. 2000 "Verizon 3rd Quarter Profit Flat, in Line With Forecasts," <i>L.A. Times</i> , 31, Oct. 2000. Vikas Bajaj, "Verizon to Close Division," <i>Dallas Morning News</i> , Oct. 20, 2000.
Excel Communications	Intent to cease local exchange service within the Texas market.	11/20/00	Letter to Commission, Robin Johnson, Assistant General Counsel, Excel Communications.

Table 20 – Changing Business Strategies for CLECs in the Texas Market

Source: Public Utility Commission

Provided below are more details on the situations faced by the companies presented in Table 20.

AT&T

In October 2000, AT&T abandoned its ambitious but unprofitable business plan of the last three years in favor of splitting into three different companies: Wireless, Broadband (containing cable), and Business Services, which contains and will eventually spin-off Consumer Services. The Business Services division will own the AT&T name and network, while the other companies will lease the rights. AT&T's plan to deliver bundled local exchange, long distance, broadband internet, and cable television over coaxial cable lines is now defunct.⁶⁵

AT&T is also spinning off Liberty Media, a cable programming company it acquired during its long buildup in preparation for the abandoned integrated cable services plan. 66 Some telecommunications analysts say that AT&T will eventually pull completely out of the local exchange market, which has produced lower revenues than

⁶⁵ Seth Schiesel, "For Local Phone Users, Choice Isn't An Option," *The New York Times*, at A1 (November 21, 2000).

⁶⁶ Geraldine Fabrikant, "AT&T Plans Spinoff to Cut Cable Holdings," *The New York Times* at C1 (November 16, 2000).

expected.⁶⁷ The company has also seen an 11% drop in its long distance earnings in 2000, down from \$22 billion.⁶⁸ With a \$62 billion debt and company stock down from a high of \$61/share in 1999 to less than \$20/share in November 2000, few financial analysts are predicting a quick recovery.⁶⁹

AT&T plans to move its Consumer Services division into bundling voice and DSL, and recently appointed David Dorman, an executive with a history of taking over troubled companies, as its president. Dorman is expected to focus on maintaining quality in the Business and Consumer Services division. Some analysts have alleged that bundling voice and data will not solve the company's problems, as it will not differentiate AT&T from the many other CLECs offering the same services. However, in the era of deregulation, long distance does not hold the same place for AT&T as it has in the past. The BOCs are entering the market with a strong customer base. As described in Chapter Three, SWBT, in particular, has picked up over a million long distance customers in Texas since July, grabbing a 12% share of the long distance market while ceding very little of the local exchange market.

Verizon

Like AT&T, Verizon is having difficulty in the competitive local exchange and long distance markets. Verizon fared better than some other major telecommunications companies, through better estimation of its profit expectations. However, local and long distance revenues are dropping for the company, which claims that data sales alone are keeping its profits aloft.⁷³

Verizon's financial difficulties in the CLEC market have apparently led the company to attempt to pull out of the residential competitive local exchange market in Texas, where it services over 43,000 customers. Verizon's CLEC, VSSI, submitted an Application for Amendment to its COA in November 2000, stating its wish to "discontinue competitive local exchange services to consumers and small business customers in Southwestern Bell and former GTE service areas." The PUC is awaiting further information from Verizon, including any plans for transfer of current customers to similar plans on other local exchange carriers and a justification for retaining its COA.

⁶⁷ Seth Schiesel, "For Local Phone Users, Choice Isn't An Option," *The New York Times*, at A1 (November 21, 2000).

⁶⁸ Deborah Solomon, "AT&T Plans Big Asset Sales to Cut Debt," *The Wall Street Journal*, at A3 (November 8, 2000).

⁶⁹ Peter Elstrom, "AT&T: Breaking Up Is Still Hard To Do," *Business Week*, at 173-174 (November 6, 2000).

⁷⁰ Deborah Solomon, "AT&T Names Telecom Veteran Dorman Head of Business, Consumer-Phone Units," *The Wall Street Journal*, at A3 (November 29, 2000).

⁷¹ Elizabeth Starr Miller, "Consumers at the Core: AT&T to Keep Consumer Side Close to Home," *Telephony*, at 28 (October 30, 2000).

⁷² Elizabeth Douglass, "Firms Giving Long-Distance Short Shrift," *The L.A. Times* (November 8, 2000), accessed via Internet, www.latimes.com.

⁷³ Shawn Young, "Verizon Reports Solid Results Amid Sales Growth," *The Wall Street Journal*, at B10 (October 31, 2000).

MCI WorldCom

Immediately following AT&T's split announcement, WorldCom revealed that it also will spin off its local exchange and long distance services, most of which it acquired when it merged with MCI Communications in 1998, into a separate tracking stock under the MCI name. As with AT&T, some analysts contend that this is the beginning of a shift away from local service. WorldCom's stock is down 75% from its 1999 peak, proportionally more than AT&T's loss. To some analysts contend that this is the beginning of a shift away from local service.

WorldCom CEO Bernard Ebbers had long presented the company as an upstart intent on taking AT&T's business, but some analysts contend that Ebbers structured his company so similarly to AT&T that he was caught in the same downdraft in long distance revenues.⁷⁷ To illustrate the cutthroat nature of the long distance environment, Ebbers described a situation in which, after MCI won a big contract for Kmart's communication business, AT&T CEO C. Michael Armstrong called Kmart and offered them service for \$5 million less than WorldCom's bid, regardless of what it was. Ebbers then offered Kmart service for \$2 million below AT&T's offer, which would have been, by his admission, less than profitable. AT&T lowered its bid again and won the contract.⁷⁸

WorldCom's push towards data is evidenced in its recent acquisition of Intermedia, a leading data provider, only a few weeks after announcing the MCI spin-off. WorldCom also recently began providing high-speed internet access in Memphis through fixed wireless technology.

Sprint

Sprint profits have been steady lately, mostly due to packaging long distance with data. Sprint's CLEC offers local exchange service in 21 markets throughout the nation and has announced plans to enter 80 more over the next year, mostly using fixed wireless technology. Sprint is de-emphasizing traditional local exchange, however, except as part of a package.

⁷⁴ Seth Schiesel, "With WorldCom's Breakup Plan, Eerie Similarities to AT&T," *The New York Times*, at C1 (November 2, 2000).

⁷⁵ Elizabeth Douglass, "Firms Giving Long-Distance Short Shrift," *The L.A. Times* (November 8, 2000), accessed via Internet, www.latimes.com.

⁷⁶ "WorldCom's Bernie Ebbers Scrambles to Raise Cash," *The New York Times*, at C1 (November 11, 2000).

⁷⁷ Seth Schiesel, "With WorldCom's Breakup Plan, Eerie Similarities to AT&T," *The New York Times*, at C1 (November 2, 2000).

⁷⁸ David Henry and Michelle Kessler, "Competition Grows Fierce," *USA Today* (November 2, 2000), accessed via Internet, <u>www.usatoday.com</u>.

⁷⁹ Bruce Meyerson, "Sprint Will Not Spin Off Long-Distance," *Austin American-Statesman*, at G4 (November 4, 2000).

⁸⁰ Paul Davidson, "Competition Squeezes Out Traditional Firms," *USA Today* (November 3, 2000). accessed via Internet, www.usatoday.com.

⁸¹ Bruce Meyerson, "Sprint Will Not Spin Off Long-Distance," *Austin American-Statesman*, at G4 (November 4, 2000).

This de-emphasis of local exchange has led the company's CLEC to cease offering residential local exchange service to new customers in Texas, as of November 27, 2000. Existing customers have been grandfathered in their service, but are not allowed to change any features or add lines at the risk of termination of service.

In October, Sprint announced plans to offer its ION (meaning "integrated on-demand") service to residential customers in Houston and Dallas. ION bundles up to four voice lines, 750 minutes of long distance, vertical telephone services, and high-speed internet access. It is unclear whether, in light of Sprint's CLEC's decision to quit offering residential local exchange service, the company will follow through with this announcement. Sprint claims that the service would cost between \$120 and \$150, and has been available to business customers in Dallas since June.

Excel Communications

Excel Communications is a CLEC focused mostly on long distance, wireless, and internet access, although the company has been offering voice in some areas of Texas. However, like Sprint and Verizon, Excel has just announced its intent to cease local exchange service in Texas, citing the difficulty of breaking into the CLEC market in Texas and concerns about the short-term profitability.

TXU / Fort Bend Communications and Reliant Communications

These two companies had some of the deepest pockets among CLECs, as well as electric industry parents with a strong local presence and name recognition in Dallas and Houston, two markets where CLECs had been building wireline infrastructure. These advantages were not sufficient to challenge SWBT in local service. Reliant Communications has announced that it is abandoning voice service to focus on data services. TXU / Fort Bend Communications has announced that it will limit its presence in the residential voice market to the more upscale and Suburban markets in Texas. By reducing its presence in residential voice markets, the company could focus on providing data services.

ILECs

In the past two years, ILECs have used the pricing flexibility and bundling of services that they gained in SB560 to try to retain customers. SWBT has raised prices on a variety of services that competitors do not provide.

SB 560 AND PRICING FLEXIBILITY

SB 560 provided ILECs with pricing and packaging flexibility for a variety of nonbasic services to allow customers to buy a bundled product of services from one provider, also known as one-stop shopping. Through one-stop shopping, a customer can often obtain a lower price for a package of bundled services, can eliminate any aggravation associated with having multiple providers, and can consolidate multiple service charges onto one bill for billing ease. Because one-stop shopping has become

popular in recent years, ILECs and their competitors are aggressively bundling services together in various packages that appeal to customers, particularly in urban areas.⁸²

ILECs, primarily SWBT and Verizon (GTE/Contel), exercised their pricing flexibility options in various ways, filing approximately 150 pricing flexibility tariffs since September 1999. 83 SWBT, in particular, offered dozens of promotions on vertical services (such as call return, Caller ID, call waiting, and speed calling) and toll services by waiving non-recurring installation charges, providing cash-back offers for customers who retain service for a minimum period, and through other incentives.

These ILECs packaged popular vertical services and toll services together in different ways that allow customers to obtain a bundle of services at a lower overall price. In September of 1999, for example, SWBT reduced prices for some toll packages, business call-management service packages, residential single-line packages, and government contracts for business lines in a range of approximately 5% to 30%. SWBT also exercised its ability to offer customer-specific pricing on many services, including long-distance services, certain high-speed digital private line services, and governmental services. By agreeing to obtain service for a fixed term, usually 1-5 years, business telephone customers benefit from lower rates offered through customer-specific contracts.⁸⁴

Over the same period SWBT also lowered the prices of some individual services, to better compete with offerings from other providers, as shown in Table 21. For example, SWBT reduced the prices for (1) its Personalized Ring and Priority Call services by 13% to 33%; (2) its Plexar I and II offerings (central-office-based PBX-type services) by 1% to 14% in 1999, and various Plexar II ancillary features by 14% to 50% (involving decreases ranging from \$.10 to \$2.50) in 2000; and (3) its shorter-term digital private-line contracts (month-to-month and 1-3 years) by 6% to 22% on average. Of these, the Plexar and private line offerings are available to business customers only.

On the other hand, SWBT has significantly increased the prices for a number of nonbasic services, often services that are very popular and for which competitive alternatives are very limited. In September of 1999, SWBT raised prices on some of its

⁸² ILECs may offer their customers the following: local exchange telephone service, custom calling features and vertical services, hardware to support custom calling features and vertical services (such as the Caller ID unit that identifies a calling number), long distance service, internet service, voice messaging services and other enhanced services, cellular telephone service, high-speed private line service, digital subscriber line (DSL) service, and other services.

⁸³ From September 1999 through October 2000, if price increases and decreases, new services, and promotions are included in the mix, the number exceeds 175.

⁸⁴ PURA §58.003(a) prohibits some customer-specific contracts until 2003, specifically those applying to a narrow range of services offered by Chapter 58 companies, primarily for the basic local lines of business and residential customers. A Chapter 58 company can offer customer-specific pricing for most of its other services, including many vertical services and toll services. For example, SWBT's tariff currently permits SWBT to enter into customer-specific contracts with residential or business customers for any long distance service it offers. Also, high-speed private lines are routinely offered on a customer-specific contract basis. Generally, business customers are more likely to find the long-term contracts attractive than are residential customers.

more popular business call-management services⁸⁵ in a range of approximately 6% to 42%. In November of 1999, SWBT increased the price of a business extra directory listing by 107%, from \$1.45 to \$3.00.⁸⁶ In June of 2000, SWBT increased its monthly rates for residential Caller ID services (caller ID name-or-number and caller ID name-and-number, both of which are very popular in Texas) in a range of 22% to 30%.⁸⁷ SWBT also raised the following rates: (1) for per-use three-way calling, from \$.75 to \$.95, with the \$6.00 monthly cap eliminated; (2) for call return, from \$.50 to \$.95 per use, while eliminating the \$4.00 monthly cap; and (3) for residential call blocker and residential auto redial, from \$2.00 to \$3.00 each per month. In late 2000, SWBT raised its analog private-line rates by an average of 15%. SWBT also recently proposed a large increase to its charge for *not* publishing a directory listing ("unlisted numbers"). Over the past two years, the price of individual vertical services tended to rise, making the package prices more attractive to customers.

Recently, the Commission established its threshold policy concerning packaging services for sale on a wholesale basis. Responding to a complaint filed by AT&T regarding SWBT's essential office package for business customers, the commission determined that an ILEC may not tie the sale of vertical services with the purchase of basic services on a wholesale basis. The Commission determined that such a pricing mechanism is presumptively an unreasonable restriction on resale that is prohibited by PURA and the FTA.⁸⁸

⁸⁵ Examples are three-way calling, anonymous call rejection, auto redial, call waiting, call waiting ID, and call forwarding. (The price for residential call forwarding, newly classified by SB 560 as a basic network service, has not been raised.)

⁸⁶ Informational Filing of Southwestern Bell Telephone Company Pricing Flexibility Associated with Business Extra Listings, Pursuant to PURA § 58.15, Tariff Control No. 21692 (November 19, 1999).

⁸⁷ Informational Notice of SWBT for Pricing Flexibility Residence and Business Call Management (Vertical) Services; Pursuant to PURA § 58.063 and § 58.152, Tariff Control No. 22719 (June 27, 2000).

⁸⁸ Complaint of AT&T Communications of the Southwest, Inc. regarding Tariff Control Number 21311, Price Flexibility-Essential Office Packages, Docket No. 21425, Final Order (December 19, 2000).

Table 21 – SWBT Price Changes Made Under SB 560†

Service	Description	Reside	Residential Prices			Business	Prices
		Old	New	Cha	ange	Old	New
Three Way Calling	Allows "on hold" & "add on" capability via switch hook	\$2.10 for first, and	\$3.00 for first, and	1	1	\$2.50	\$4.00
Call Forwarding	Permits transfer of incoming calls to another phone no.	\$1.40 per additional	\$2.00 per additional	1	1	\$3.50	\$6.00
Speed Calling 8	Permits speed dialing for up to eight programmed numbers	of these services	of these services		\	\$2.50	\$1.50
Anonymous call rejection	Permits automatic rejection of anonymous incoming calls via Caller ID	\$1.00	\$1.00	=	1	\$1.00	\$2.00
Auto Redial	Rings a called busy number when available	\$2.00	\$3.00	1	1	\$3.50	\$4.00
Call Waiting	Indicates an incoming call while on the line	\$2.80	\$2.80	=	1	\$3.25	\$5.00
Call Waiting ID	Identifies name and/or number of incoming call while on line	\$3.00	\$3.00	=	1	\$3.00	\$5.00
Caller ID Name or Caller ID Number	Shows Name or Number of Incoming Caller	\$4.95	\$6.50	1	1	\$7.50	\$8.00
Call Blocker	Blocks incoming calls from designated numbers	\$2.00	\$3.00	1	1	\$3.00	\$3.50
Speed 30	Permits speed dialing for up to 30 programmed numbers	NA	NA	↓	1	\$3.20	\$2.00
Priority Call	Provides distinctive ring on calls from designated numbers	\$2.50	\$2.00	1	\	\$3.00	\$2.00
Personalized Ring I	Distinctive ring for an additional number on same access line	\$4.00	\$3.50	1	1	\$6.00	\$5.00
Call Return	Rings most recent calling number by dialing *69	\$.50 each, \$4.00 cap	\$.95 each (no cap)	1	1	\$.50 each \$4.00 cap	\$.95 each (no cap)
Three Way Calling, per use	Allows "on hold" and "add on" capabilities via switch hook	\$.75	\$.95	1	1	\$.75	\$.95
Call Trace, per Activation	Traces last incoming call, via activation before next call received	\$8.00	\$7.00	\	\	\$8.00	\$7.00
Directory Assistance – Direct Dialed	Provides directory assistance via calling 1-411; call allowances not affected	\$.30 per use	\$.75 per use on local calls	1	1	\$.30 per use	\$.75 per use on local calls
Directory Assistance Call Completion – Direct	Connects caller to number obtained when dialing directory assistance	\$.30 per use	\$.05 per use	\	1	\$.30 per use	\$.05 per use

† Old and New compares prices from August1999 through December 2000 Source: SWBT filings

PRICING AND PACKAGING COMPARISONS AMONG PROVIDERS

Basic Service Charges

For a residential customer desiring only basic local service with no additional services (such as call waiting, call forwarding, caller ID, etc.), the minimum rates offered by the leading companies are shown in Table 22 below. Except for SWBT, most telecommunications companies do not package special long distance rates for customers seeking minimum basic service.

All cost figures are subject to fees, taxes, and surcharges, and may vary slightly among areas. Long distance packages are extra unless noted otherwise.

Table 22 – Minimum Rates for Basic Local Residential Service

Company	SW Bell	Sprint (ILEC)	AT&T	MCI
Dial Tone	Χ	X	Χ	Χ
Other	Optional long	some additional		
	distance at	services may be		
	\$0.09/minute	available at no charge		
Cost per Month	\$12-\$16*	\$11-\$16.75*	\$15	\$7.75-\$10.50

^{*}Includes Subscriber Line Charge, may include mandatory Extended Area Service and Expanded Local Calling Service Source: Public Utility Commission, Survey of company offerings as of November 28, 2000

Residential Package Comparison

Some residential customers hope to save money on local service, vertical services, and long distance through packages, which telephone companies are happy to offer to win more customers in the residential market. Table 23 shows some of the service packages offered by major telephone companies. The SWBT plan integrates many vertical services with local exchange service and a long distance plan. Sprint offers two packages, one with a set long distance plan and one that allows access to any of its preestablished long distance plans. AT&T offers a fixed long distance plan with customer choice in the number and type of vertical services. The MCI Worldcom packages offer permutations on local service combined with customer choice in different long distance plans and optional vertical services.

All packages are subject to service limitations and may not be available in all areas. All cost figures are subject to fees, taxes, and surcharges, and may vary slightly among areas.

Table 23 – Comparison of Local and Long Distance Residential Service Packages

Company	SW Bell	Sprint	Sprint	AT8	τ		MCI	MCI
Package	Phone	Connected	Custom II	Local One		9	One Company	One Company
	Solution	Solution	Solution	Rate	Rate Texas		Advantage 200	Advantage 7
Dial Tone	Χ	Χ	Χ	Χ			Х	Χ
Long Distance	\$0.06	100 minutes	Choice of	\$0.0	\$0.07		200 minutes	\$0.07
Cost per Minute		included,	Sprint Long				included,	
•		\$0.10 over	Distance				\$0.07 over 200	
		100 minutes	Packages				minutes	
Vertical Package	The	Essentials	Essentials	Cho	ice of		MCI Premium Pa	ckages
(Features Below)	Works			Feat	ture Pl	ans:	available, but not	mandatory
				3	5	10		·
Anonymous Call Rejection	Х	Х	X				Choice of	5 or 10
Auto Redial	Χ	Χ	Χ			Χ	Choice of	5 or 10
Call Block	Х							
Call Forwarding	Χ	Χ	Χ	Χ*		Χ	Choice of	
Call Forwarding – Busy							Choice of	5 or 10
Call Forwarding – Busy & No Answer							Choice of	5 or 10
Call Forwarding – No Answer							Choice of	5 or 10
Call Return	Χ	Χ	Χ			Χ	Choice of	5 or 10
Call Screening				Χ*	Х	Χ	Choice of	5 or 10
Call Waiting	Χ	Χ	Χ	Χ*	Χ	Χ	Choice of	5 or 10
Call Waiting ID	Χ						Choice of	5 or 10
Call Waiting ID Plus							Choice of	
Caller ID	Χ	Χ	Χ	Χ*	Χ	Χ	Choice of	5 or 10
Caller ID (no name)							Choice of	5 or 10
Distinctive Ring						Χ	Choice of	5 or 10
Non-listed Number				Χ*				
Non-published				Χ*				
Number								
 Priority Call 	Χ						Choice of	5 or 10
 Priority Call Forwarding 							Choice of	5 or 10
Selective Call	Х					Х		
Forwarding Speed Dial 8	X					Х	Choice of	5 or 10
Three Way Calling	X	Χ	Χ	Χ*	Х	X	Choice of	
Voice Mail	X	^	٨	^	^	_ ^	CHOICE OF	J 01 10
Inside Wire	X							
Maintenance Plan	^							
Other				Airline Miles or Blockbuster Certificat		Certificates		
Cost per Month	\$39.95 plus	\$30	\$25 plus long	3 Features: \$22.95-\$25.95			No Features: \$29.99	No Features: \$19.99
	installation		distance plan costs	5 Features: \$27.95 10 Features: \$32.95		5 res:	5 Features: \$40.94 10 Features: \$45.94	5 Features: \$30.94 10 Features: \$35.94

*Choice of Three

Source: Public Utility Commission, Survey of company offerings as of November 28, 2000

Small Business Package Costs Compared to Residential Costs

Given that some of the price drops in the above chart are found among services that business customers may be more likely to use than residential customers, it is also of interest to see how basic service packages for business customers compare to those for residential customers. SWBT appears to be the only major company offering business customers a better price on vertical service packages than the price they offer residential customers for the same services. Table 24 shows how SWBT's BASICS Business Plan offers a package of vertical services to business customers at a better price than it offers to residential customers, who could get the exact same package only by buying each of those services at their respective unbundled rates. SWBT does, however, offer a larger package of vertical services to residential customers at a slightly higher rate that is unavailable to business customers.

Table 24 – A Business/Residential Basic Package Cost Comparison

Company	SW Bell	SW Bell	SW Bell
Package	Business BASICS Plan	Unbundled Residential Services Comparable to the BASICS Business Plan (not a package)	Residential WORKS Package
Auto Redial	Choice of One	Choice of One	Х
Call Blocker	Choice of One	Choice of One	Х
Call Forwarding	Х	X	Х
Call Return	Choice of One	Choice of One	Х
Call Waiting	X	X	Х
Call Waiting ID	Χ	X	
Caller ID	Х	X	Х
Priority Call			Х
Remote Access to Call Forwarding	X	X	
Selective Call Forwarding	Choice of One	Choice of One	Х
Speed Calling-8			Х
Three-Way Calling	Choice of One	Choice of One	Х
Cost Per Month	\$16.95	\$18.75-\$20.75	\$19.95

Source: Public Utility Commission, Survey of company offerings as of November 28, 2000

Internet Access Packages Comparison

Although all of the major telephone companies claim to be moving towards offering bundled voice and data, only SWBT and Sprint are currently offering such packages in Texas. Table 25 examines the differences in these packages. SWBT has organized a number of packages around integrated services, including combining dial tone and long distance with internet access, wireless service, and DIRECTV. None of the other major telephone companies has taken such steps in Texas, although Sprint has announced plans to offer its similar ION service in Dallas and Houston next year. At

⁸⁹ All packages are subject to service limitations and may not be available in all areas. All cost figures are above and beyond basic service rates (including dial tone), are subject to fees, taxes, and surcharges, and may vary slightly among areas.

present, Sprint has packaged several long distance plans with internet access, which can be combined with its local service Custom II Solutions plan in a way that is competitive with SWBT's internet access plans.⁹⁰

Table 25 – Comparison of Internet Access Packages for Residential Customers

Company	SW Bell	SW Bell	Sprint	Sprint		
Package	DSL Web	Web	7¢ Anytime and Earthlink	1000 Nights and Earthlink		
_	Solution	Solution	-	-		
Dial Tone	Χ	Χ	Available through Sprint Custom II	Solution (not mandatory)		
Long Distance	\$0.06	\$0.06	\$0.07	1000 minutes included		
Cost per Minute				during 7pm – 7am,		
				\$0.10 for calls over 1000		
				minutes and at other times		
Vertical Features	Same as SV	V Bell Phone	Available through Sprint Custom II Solution (not mandatory)			
	Solution					
56k Unlimited		Χ	X	X		
Internet Access						
DSL	Χ					
Email Addresses	5-10	11	6	1		
Web Site Space	3-6 MB		6 MB	6 MB		
Contract	1 year	No	no	no		
Other		2 nd Phone Line				
Cost per Month	\$88.95	\$65.95	\$19.95	\$30		
	plus	plus	(with no local service)	(with no local service)		
	installation	installation	\$44.95	\$55		
			(with Sprint Custom II Solution)	(with Sprint Custom II Solution)		

Source: Public Utility Commission, Survey of company offerings as of November 28, 2000

Conclusion

Investors provided CLECs with a large amount of money in the form of equity, debt, and bank loans in the late 1990s to challenge well-heeled ILECs across the country. As a result, as seen in Chapter 3, CLECs gained market share in local telephony in the late 1990s in Texas.

In 1998 and 1999, a sizeable number of CLECs entered the Texas market, including a number of well-financed long-distance carriers and start-ups. Some of the investment was speculative, however, as 40 percent stated that they had no customers as of December 31, 1999.

In the seven months from March to October 2000, prices of CLECs' bonds and stocks fell sharply, crimping the funding for sizeable CLECs that had planned to compete in the Texas local voice market. At the same time, SWBT's stock rebounded from its low of calendar year 2000.

⁹⁰ All packages are subject to service limitations and may not be available in all areas. All cost figures are subject to fees, taxes, and surcharges, and may vary slightly among areas.

CHAPTER 5: ALTERNATIVE MARKET PROVIDERS

Through most of the 20th Century, the prevailing view of telephony was that wireline was the only means to provide voice telephone services. This monopoly provision of telephone service required that state and federal governments maintain continuing oversight of and intervention in the industry. As technological changes and market forces reinforced by regulation-based price distortions changed the cost and benefits of maintaining monopoly service in voice telephony, state and federal governments responded through legal and regulatory changes. The breakup of AT&T in the 1980s unbundled long-distance voice from local voice services. The federal Telecommunications Act of 1996 created the ground rules for entry of CLECs into local voice telephony, whose entry in turn culminated in SWBT's entry into the long distance market.

Technology is again reshaping the competitive landscape of telecommunications. New technologies such as cable, wireless, satellite, and voice over internet protocol (VoIP) likely will create new avenues and providers for customers to receive traditional local and long distance voice services, profoundly changing the market structure from the customers' point of view. Telecommunication providers will sell local and long-distance voice services as part of a bundled product, where pricing, terms and conditions of voice service will no longer be determined independently of other telecommunications services.

New market segments and technologies, such as wireless telephony, the Internet, and local and long-distance data services are diminishing the importance of long distance and local voice on wireline. J.P. Morgan Securities, in a recent analysis of the telecommunications industry, has estimated that both local and long distance wireline voice, which accounted for about 70 percent of 1999 telecommunication revenues in the United States, will account for only 39 percent of revenues in 2005. 91

The rise of Internet Protocol as the backbone for wireline telecommunications has the potential to replace the dedicated switched circuit that has been the basis of telephony for the past century. J.P Morgan also projected that information transmitted through the Internet Protocol (IP) alone probably will comprise more than 90 percent of the wireline bit stream in 2005, compared with 13 percent in 1998.⁹²

The purpose of this chapter is to discuss alternatives to wireline telephony, not with regard to their technological feasibility, but with respect to their potential to

⁹¹ J.P. Morgan Securities, Equity Research, *Telecom Services, A Fresh Look at the Industry*, at 4, Table 1 (Sept. 8, 2000).

⁹² *Id* at 6.

seriously challenge wireline ILECs for market share. While CLECs and ILECs have deployed most of the alternatives discussed below, their availability at a price that would be competitive to the majority of Texans is limited to one exception: mobile telephony.

This report divides these technologies into three categories: current competitors, This report draws from the coming competitors, and potential future competitors. Commission's recent Advanced Services Report to discuss these technologies. 93

Current Competitor

Currently, wireline voice has one competitor that provides local and long-distance voice at a price and quality that is becoming comparable to that of wireline service: mobile telephony.

MOBILE TELEPHONY

In the United States in the twelve months ending December 1999, mobile telephony subscribership increased 24 percent from 69.2 million to 86 million. Eightyeight percent of the total U.S. population has three or more different operators offering mobile telephone service in the county where they reside. Moreover, 69 percent of the population live in areas with five or more mobile telephone operators offering service.⁹⁴

According to the FCC, nearly one in every three Texans was a mobile telephone subscriber at year-end 1999. In particular, Texas had 0.29 subscribers per capita, the same rate as the United States as a whole, as shown in Table 26. Texas also had 0.44 subscribers per end-user wireline, which is comparable to the United States, with 0.42 subscribers per end-user wireline. 95

The price of mobile telephone service reportedly decreased by 11.3 percent between the end of January 1999 and the end of January 2000. Some reports estimate that the prices fell as much as 20 percent between 1998 and 1999. Further, one analyst claimed that roaming rates per minute have declined. The local average roaming rate per minute fell from \$0.75 in the fourth quarter of 1997 to \$0.37 in the first quarter of 1999. 97

At present, concerns about the quality of service of wireless telephony have kept consumers from using wireless telephony as a complete substitute for local wireline service. Fast-growing demand has required companies to invest in large-scale, rapid expansion of their facilities in a short period of time, and the multiple wireless systems in the United States increase the complexity of providing telecommunication service relative to wireless services in Europe.

⁹³ Public Utility Commission of Texas, Report to the 77th Legislature on Advanced Services in Rural and High Cost Areas (January 2001).

⁹⁴ FCC Releases Fifth Annual Report on State of Wireless Industry, CC Docket No. 00-289, Report (Rel. August 2000).

⁹⁵ Federal Communications Commission, Local Telephone Competition at the New Millennium, Tables 4 and 5 (August 2000).

⁹⁶ Id.

⁹⁷ *Id* at 20.

Table 26 – Mobile Telephone Subscribers Reported: Year-End 1999 ** 98

	Number of		Percent of		Subscribers
State	Carriers	Subscribers	Nation	Population ***	per Capita
Alabama	10	1,080,410	1.4 %	4,369,862	0.25
Alaska	5	165,221	0.2	619,500	0.27
Arizona	9	1,125,321	1.4	4,778,332	0.24
Arkansas	5	719,919	0.9	2,551,373	0.28
California	11	8,544,941	10.7	33,145,121	0.26
Colorado	8	1,552,718	1.9	4,056,133	0.38
Connecticut	6	1,077,089	1.4	3,282,031	0.33
Delaware	5	270,848	0.3	753,538	0.36
District of Columbia	5	910,116	1.1	519,000	1.75
Florida	14	5,158,079	6.5	15,111,244	0.34
Georgia	13	2,538,983	3.2	7,788,240	0.33
Hawaii	8	288,425	0.4	1,185,497	0.24
Idaho	4	271,436	0.3	1,251,700	0.22
Illinois	10	3,922,482	4.9	12,128,370	0.32
Indiana	10	1,318,975	1.7	5,942,901	0.32
Iowa	9	774,773	1.0	2,869,413	0.22
Kansas	11		0.8		0.27
	12	669,472	1.1	2,654,052	0.23
Kentucky	9	911,700	1.5	3,960,825	
Louisiana Maine		1,227,106		4,372,035	0.28
	4	187,003	0.2	1,253,040	0.15
Maryland	7	1,473,494	1.8	5,171,634	0.28
Massachusetts	6	1,892,014	2.4	6,175,169	0.31
Michigan	13	3,512,813	4.4	9,863,775	0.36
Minnesota	13	1,550,411	1.9	4,775,508	0.32
Mississippi	6	673,355	0.8	2,768,619	0.24
Missouri	10	1,855,452	2.3	5,468,338	0.34
Montana		•	*	882,779	^ 2.5
Nebraska	4	576,296	0.7	1,666,028	0.35
Nevada	7	750,335	0.9	1,809,253	0.41
New Hampshire	6	280,508	0.4	1,201,134	0.23
New Jersey	5	2,289,181	2.9	8,143,412	0.28
New Mexico	6	363,827	0.5	1,739,844	0.21
New York	7	4,833,816	6.1	18,196,601	0.27
North Carolina	11	2,536,068	3.2	7,650,789	0.33
North Dakota	*	*	*	633,666	*
Ohio	12	3,237,786	4.1	11,256,654	0.29
Oklahoma	9	826,637	1.0	3,358,044	0.25
Oregon	7	914,848	1.1	3,316,154	0.28
Pennsylvania	12	2,767,474	3.5	11,994,016	0.23
Puerto Rico	*	*	*	3,889,507	*
Rhode Island	6	279,304	0.4	990,819	0.28
South Carolina	7	1,137,232	1.4	3,885,736	0.29
South Dakota	*	*	*	733,133	*
Tennessee	9	1,529,054	1.9	5,483,535	0.28
Texas	20	5,792,453	7.3	20,044,141	0.29
U.S. Virgin Islands	*	*	*	120,917	*
Utah	8	643,824	0.8	2,129,836	0.30
Vermont	*	*	*	593,740	*
Virginia	12	1,860,262	2.3	6,872,912	0.27
Washington	8	1,873,475	2.4	5,756,361	0.33
West Virginia	7	241,265	0.3	1,806,928	0.13
Wisconsin	9	1,525,818	1.9	5,250,446	0.29
Wyoming	4	127,634	0.2	479,602	0.27
Nationwide	76	79,696,083	100.0	276,701,237	0.29

⁹⁸ Local Telephone Competition at the New Millennium, Federal Communications Commission, Common Carrier Bureau, Industry Analysis Division (August 2000).

Data withheld to maintain firm confidentiality.
 Carriers with under 10,000 subscribers in a state were not required to report.

^{***} Population as of July 1999.

Coming Competitors

Three alternatives for voice telephony - cable television (broadband), voice over the Internet, and fixed wireless - are currently available in limited areas. While they do not at present pose a strong competitive challenge to wireline telephony based on dedicated switched circuits, they have the potential in the near future to be viable alternatives for telephone customers.

CABLE TELEVISION

Cable TV has been a part of American homes for decades. A number of CLECs, most prominently AT&T, have sought to commercialize the technology that could provide voice telephony over the same connection that provides cable TV. The technology involved uses the cable modem to split voice telephony from the cable signal, so that the customer would use a telephone rather than the television set to make telephone calls. ⁹⁹

Voice telephony over cable is part of a larger plan to provide broadband access that will bundle all telecommunication services into one package (voice, TV, and Internet). The customer would receive one monthly bill, also known as "one-stop shopping." Additional services that cable providers would like to sell to customers in the future include video conferencing and video on demand.

Cable is available in many areas of the United States. Cable infrastructure reaches 70% of American households, some 67 million subscribers. The physical presence of cable in an area alone does not ensure broadband or basic Internet cable modem access. Only 40% of homes with cable have been upgraded to allow broadband access. By July of 2000, 2.27 million residential and small business users were accessing the Internet via cable modems. Projections show that over 3.6 million cable modems will be in use by the end of 2000. This is over a 100% rise this year, and projections indicate a steady though slowing increase over the next few years.

Competition in providing cable services will occur in cities and urban areas where high population density will allow many providers to survive for the next few years, until the next generation of services and technology redefines advanced services. The areas that have neither cable nor telephone access are low density rural areas. Most small cities and many rural communities have cable facilities in Texas. Yet these systems still

⁹⁹ This technology is distinct from Voice over Internet Protocol discussed below.

¹⁰⁰ Cable Modem Market Stats & Projections. Cable Datacom News, March 3, 2000. http://www.cabledatacomenws.com/cmic/cmic16.html. *See also* Annual Assessment of the Status of Competition in Markets for the Delivery of Video Programming, Sixth Annual Report. CC Docket No. 99-230 (Jan. 14, 2000).

¹⁰¹ "NCTA Reports Fast Growth in Cable Modem, Telephony Rollouts." *Telecommunications Report Daily* (July 26, 2000). http://www.tr.com.

¹⁰² "NCTA Reports Fast Growth in Cable Modem, Telephony Rollouts." *Telecommunications Report Daily* (July 26, 2000). http://www.tr.com.

service only areas where population density is large enough to support building the initial infrastructure.

VOICE OVER INTERNET (VOIP)

Internet Protocol (IP) has revolutionized data communications worldwide. As the speed and reliability of the Internet improve, it is relatively easy to communicate using VOIP. Voice transmission has been digitized on telecommunications carrier networks in some cases since the 1960s, and encoding voice messages over the Internet is a natural progression. There are many varieties of VOIP in use today, from rudimentary connections between two computers to sophisticated corporate interconnections. Today's VOIP status should generally be viewed as an emerging application, used by a growing number of customers with varying degrees of satisfaction.

VOIP relies more on the packet-switched Internet rather than the circuit-switched telephone network, and "lost," retransmitted, or otherwise delayed packets are more disruptive to voice calls than they are to data transmission. As a result, customer satisfaction with VOIP calls varies. However, as technology progresses, VOIP is expected to account for increased traffic. According to an analyst with U.S. Bancorp, VOIP, which accounted for less than 1% of global telecom traffic in 1999, is expected to surge to 17% by 2003 and more than 30% by 2005. 103

In Texas in the fall of 2000, SBC Communications, Inc., proposed to provide an IP phone system for the city government of Dallas. SBC Communications claimed that voice quality should not be an issue in the city's network because phone traffic will have a priority over data. ¹⁰⁴

FIXED WIRELESS

Fixed wireless is a system that provides high-speed services to customers by attaching to the customer's premises a radio transmitter/receiver (transceiver) that communicates with the provider's central antenna site. By doing so, the central antenna site acts as the gateway into the public switched telephone network or the Internet for the transceivers. Basically, the radio signals serve as a substitute for the copper wire or cable strand that connect customers to the network in traditional, wired technologies.

The market for fixed wireless services is expected to reach about \$1 billion by the end of 2002, according to market researcher Gartner Group. Analysts expect the national fixed wireless market to grow significantly in the next three to five years, with projections estimated at 2.0 to 2.6 millions subscribers by 2003. 105

In geographic areas with limited cable or telephone infrastructure, as in some rural areas of Texas and the rest of the United States, providers can deploy a fixed

Special Report – The Talking Internet, BusinessWeek Online, May 1, 2000, http://www.businessweek.com/2000/00_18/b3679024.htm.

 $^{^{104}}$ "SBC Proposes High-Tech Phone System for Dallas," $\it Dallas$ Morning News (October 24.2000).

Peter Jarich and Mendelson, James, *U.S. Wireless Broadband* at 243, 252, and 262; Strategies Group, *High-Speed Internet Report* at 131 (Nov. 8, 2000), http://www.strategisgroup.com/.

wireless network faster and cheaper than a xDSL or cable modem system. While infrastructure costs of wireless networks may be significantly less than those of wireline networks, wireless networks incur substantial costs acquiring spectrum.

In the year 2000 fixed wireless saw an improved competitive position as an alternative to local fixed wireline service in Texas when the Commission designated Western Wireless Corporation as an Eligible Telecommunications Carrier (ETC) and an Eligible Telecommunications Provider (ETP). The Commission action put the company one step closer to offering local service in certain rural areas of Texas.

Potential Future Competitors

The following technologies could have the potential to offer local and long distance service in the future, but currently are not ready for commercial application. If either or both applications become commercially viable in the future, Texas customers would have additional alternative means of delivery of telephone service that could increase the level of competition in voice telephony.

SATELLITE

Traditional satellite networks have been limited to specialized private VSAT networks, low bandwidth services and DTH video, but new broadband satellite systems are offering service comparable to current broadband terrestrial services. Satellite services can include any fixed multimedia service, from Internet access, local telephony, cable, video transmission, private business networks, telemedicine, teleeducation, and video conferencing.

Service to whole regions, reaching low subscriber-density areas without costly construction of terrestrial networks, gives satellite technology a promising future. Today, however, most current residential satellite offerings provide information in only one direction, downstream into the home of the user. The user needs a standard dial-up connection to send information upstream. Several satellite providers have announced plans to provide residential service with both downstream and upstream paths via satellite.

ELECTRICITY TRANSMISSION LINES FOR TELECOMMUNICATIONS

In the future, consumers may have access to voice telephony and the Internet using the electric grid. Two companies, Northern Telecom and Norweb Communications, have been developing the means to send vast amounts of data along power lines without distortion from electric current. In the future, every home in the country could have a second telephony wireline connection, increasing competition for telecommunication providers.

The system works by using either fiber-optic or radio links to transmit data from the Internet to local electricity sub-stations. The low-voltage part of the electricity network then becomes a local area network. A small box is installed next to the electricity meter in the home to send and receive data. The box itself is connected by ordinary cable

to personal computers, which will need to be fitted with a special card and software. The new technology eventually could enable the introduction of applications such as electronic commerce, telenetworking, web broadcast media, entertainment, and Internet telephony on a mass-market scale.

Conclusion

Mobile telephony is just the beginning of the technological transformation of the traditional voice telephony market. While Commission data suggest that CLECs have increased their market share in wireline service in Texas from a very low base, CLECs have not dislodged the predominance of ILECs in wireline telephony. Advances in telecommunications, however, offer the chance for a much more powerful form of competition in the future using methods of delivering local telephony without a large, well-financed incumbent to challenge directly for market share.

CHAPTER 6: TELECOMMUNICATIONS IN TEXAS – PAST, PRESENT, AND FUTURE

As in previous years, this Scope of Competition Report has focused on competition in wireline voice services. In most of the past reports, local competition could only be discussed in terms of niche providers, with long distance services being the main arena of competition. With the implementation of PURA 95 and the FTA finally underway, the 1999 Scope Report could finally document a CLEC presence in the local telecommunications market. In the last Scope of Competition Report, in 1999, the evidence could support only what can perhaps be called a "toe-hold" for competition.

Evidence available for this report clearly demonstrates that competitive providers have a visible market share, with dozens of CLECs entering the more lucrative local wireline voice markets in Texas by the end of 1999. Clearly, the potential exists for creating competition in local telephony in the urban areas of Texas, if not the state as a whole.

Though trends of the last several years suggest that Texas is poised for competition in local voice telephony, events in the year 2000 have created a dramatically different backdrop for competition in local voice telephony. The recent slump in the share prices of CLECs and the reorganizations of AT&T, Sprint, and Worldcom announced in the fall of 2000 suggest that CLECs may be heading for a period of consolidation

In the next five years, however, even more sweeping changes in technology and the newly found ability of the former monopolies and CLECs to offer "one stop shopping" for a wide range of telecommunications services will overshadow the fight for market share in wireline telephony. Future reports may focus on these trends far more than on the entry of CLECs into the local wireline service territories of Verizon, SWBT, and Valor.

Past: CLECs Flood into Texas

There exists in Texas a legal and regulatory framework that can facilitate competition to enter local telephony for customers of SWBT, Verizon, and Valor Telecommunications (the ILEC in some of Verizon's former service territories). The Commission opened the door to competition in wireline for SWBT through SWBT's Section 271 proceeding, arbitrations between SWBT and CLECs, and various rulemakings.

In 1998 and 1999, in response to these new opportunities for entry into local voice telephony, CLECs entered the Texas market as rapidly as anywhere else in the United States. A recent FCC study on competition for local voice service found that Texas ties New York for being the states with the largest number of operating CLECs. This result, on its face, supports the notion that the regulatory atmosphere in Texas is friendly for competition.

Such factors as population growth, economic growth, and population density also appear to be important considerations in the decisions of CLECs to invest in or resell voice telephony facilities in a given area of Texas. The Large Metropolitan areas and the Suburban counties, which combined comprise almost 60 percent of Texas' population, have heavy concentrations of CLECs. Data show that the Dallas and Houston metro areas have about twenty or more CLECs serving customers, while San Antonio and Austin have ten or more CLECs serving customers. Many rural areas that allow for customer choice have a choice of two, three, or more CLECs, in addition to an ILEC. Some of these competitors, however, may be aimed at customers with poor credit histories and are not vying for the average local customer's business.

Data for 1999 show while statewide CLECs are using equally all three means of entry that the FTA envisioned – construction of new lines, purchase of UNEs, and resale of telephone service - to gain entry into local telephony, the strategy varies dramatically by size of the market. CLECs built facilities in Dallas, Houston, San Antonio, and Austin to compete with ILECs, particularly for business customers. Outside the Large Metro areas, however, CLECs pursued customers by purchasing UNEs and reselling telephone services.

The market share of local access lines of CLEC in the Suburbs is about 12 percent and in Large Metropolitan areas about eight percent. The eight percent figure probably masks a wide range of market penetration rates that includes a lower penetration rate in El Paso and higher penetration rates in the Dallas and Houston, areas. The latter have large and growing residential and business populations, a high population density, and high *per capita* incomes. Seventy percent of CLECs' customers in the Large Metro areas and Suburbs are businesses.

CLECs in rural areas are showing little or no market share at this point, but that fact may reflect in part the legal and regulatory prohibitions to competition as well as poor economics of doing business in rural areas. (Counties with a population of 20,000 people or fewer have a CLEC penetration rate of less than 2 percent.) Seventy percent of their customers are residential. The entry of some telephone cooperatives into the market, particularly those in or near wealthier parts of West Texas, may indicate that some CLECs might be focusing on rural or small-town areas that allow customer choice. These CLECs may possess expertise that can make them very competitive without drawing competition from companies with deep pockets.

Having CLECs enter new markets is only the first stage of offering customer choice. CLECs must have the power to fight for market share for a sustained period before Texans harvest the fruits of competition. A key factor in developing competition in local telephony over time will be the capitalization of those CLECs.

The good news for the 1998-1999 period was that about a quarter of CLECs had market capitalizations of at least \$1 billion, an order of magnitude comparable to the capitalizations of the two largest ILECs, Verizon and SWBT. Areas of Texas served by these well-capitalized CLECs were much better positioned to receive the benefits of competition in local telephony and the benefits of competition for bundled services ("one-stop shopping").

Though almost 100 CLECs responded to the Commission survey, two-thirds of the CLECs were private firms with capitalizations that were unknown or less than \$100 million. These CLECs may have limited prospects that may lead to failures and mergers for many of them under the best of market conditions.

Affiliates of eight cooperatives have filed as CLECs, located near areas with high *per capita* incomes. Given that most of them have small capitalizations of \$20 million or less, it will be a formidable task for them to become more than regional or niche players. Rural areas where ILECs face their primary competition from these CLECs face uncertain prospects for competition in local telephony in the long term.

Present: ILECs Adapt, CLECs Struggle

ILECs

The ILECs that must allow the greatest customer choice – SWBT and Verizon – responded to new market opportunities in 1998 and 1999. Indirect effects of deregulation and competition in local exchange service in Texas have led to a sale of rural exchanges in Texas in 1999-2000. Verizon and SWBT have contended with the heavy investment in facilities of CLECs in the metropolitan areas of Texas. With competition increasing in some parts of their service territories, these companies had incentives to rethink their holdings and strategic approach to selling telephony in Texas.

Southwestern Bell

SWBT's competitive position in Texas has strengthened considerably in the past year. SB 560 granted SWBT pricing flexibility in vertical services, an important means to lower prices where competition with CLECs exists, and raise prices where competition is limited. For example, in 2000 SWBT significantly increased the prices for a number of nonbasic services, often services that are very popular and for which competitive alternatives are limited.

SB 560 also granted SWBT the ability to competitively bundle its products. An important additional piece in SWBT's "one-stop" shopping strategy was SWBT's receiving a favorable recommendation from the Commission on its Section 271 application, leading to FCC approval for SWBT to offer long distance service in Texas in the second half of 2000. SWBT at present has very limited competition in providing bundled services in Texas.

Verizon

During the last two years Verizon implemented an additional strategy to cope with shareholder or market pressure, including reducing its presence in local voice markets in Texas as a CLEC. Verizon chose to sell some of its rural exchanges in various states to earn a better return on its assets in a changing telecommunications industry. Verizon's sale of a number of rural exchanges to Valor this year was part of this national trend.

A number of ILECs across the country have been seeking changes in the geographical boundaries of their operations to meet competitive challenges elsewhere. According to a recent U.S. General Accounting Office (GAO) survey of state public utility commissions, of the nearly 832,000 access lines that major ILECs have sold from January 1996 through April 2000, an estimated 68 percent were in rural areas. The GAO analyzed 27 pending sales, totaling 901,000 access lines, and found that 872,000, or 97 percent, were in rural areas.

Telephone cooperatives and small private telephone companies in rural parts of Texas might do something similar to the Verizon sale and merge or purchase each other's service territories. These ILECs could then capture economies of scale and use their expertise in handling the multitude of services and would possess sufficient capitalization to invest in lines and equipment to upgrade a system in the targeted service territory. The quality and range of services, therefore, might improve in parts of rural Texas even without direct competition from CLECs, competition that is very unlikely until alternative technologies described in this report become widely available.

CLECs

In the second half of the 1990s, technological breakthroughs and deregulation in the telecommunications industry created new and highly uncertain investment opportunities for investors. By the late 1990s, investors in the telecommunications industry faced investments that had a high risk / high reward profile in an industry that was once considered the realm for retirees searching for a safe, fixed return on assets. Venture capitalists, private investors, and commercial banks flooded the telecommunications industry with investment capital.

As a result, in the late 1990s, the telecommunications industry saw a proliferation of small or poorly capitalized CLECs that were vulnerable to the level of risk investors (mutual fund managers, investment banks, and commercial banks) would tolerate over time. Large long-distance carriers such as AT&T and Worldcom made large-scale investments in new technologies to compete with SWBT for customers that wanted "one-stop" shopping in telecommunications services.

¹⁰⁶ United States General Accounting Office, *Telecommunications: Issues Related to Local Telephone Service*, Report to the Ranking Minority Member, Committee on Commerce, Science, and Transportation, U.S. Senate, GAO/RCED-00-237 at 5 (August 2000).

The rush into the new world of telephony created a classic bubble in telecommunications stocks. According to a NASDAQ index of telecommunications companies, share prices rose 300 percent from January 1998 to early March 2000. By early 2000 such an increase provided CLECs with large capitalizations, allowing them to challenge ILECs for market share in local exchange service in Texas.

As with other stock market bubbles, this one burst, forcing the industry to endure bankruptcies of some leading CLECs and massive restructuring of others. Increased competition by ILECs in long distance, and the perception by the market that long-distance service using dedicated switched circuits was yesterday's technology, took its toll on the three dominant long distance carriers. Some analysts believe that traditional long-distance business is going away and will be replaced by any-distance calls and data transmissions that also include voice. With the entry or potential entry of ILECs into long-distance telephony, prices and revenues for long-distance providers have fallen, contributing to the fall in the market capitalization of large CLECs.

The fall in the market capitalizations of large CLECs that are long distance carriers has left them in a weaker position to provide competition in local exchanges in Texas. In October and November 2000, these long-distance carriers announced their intentions to reduce their emphasis on residential services in Texas as part of massive restructuring of their business lines.

The sharp fall in share and bond prices in 2000 for CLECs may presage consolidation in the telecommunications sector. A handful of CLECs that each had capitalizations of \$1 billion or more in 1999 saw their share prices drop over 95 percent during 2000. Thirty-eight of the CLECs that responded to the data collection instrument stated that they had not started serving customers in Texas at the end of 1999 and may not have sufficient revenue to weather the decline in the financial support needed to challenge an ILEC.

By the end of 2000, SWBT's financial position had strengthened relative to the CLECs. SWBT's entry into the long distance market has weakened the ability of CLECs to challenge SWBT in local voice service. Without investor confidence and funding, in the near term CLECs might pose a weaker challenge to SWBT for local wireline voice telephony or in the "one-stop" shopping market than they did in 1998 and 1999. The Commission has noted that in 2000 SWBT raised its prices on a number of vertical services and was successful in rapidly gaining market share in the long distance market, even though it was offering interLATA long distance to only customers who had SWBT as an ILEC.

In the short term, the largest potential impact of CLECs' financial troubles will be to limit their ability to enter a local market by making long-term investments in plant and equipment. Physical investment in new plant and equipment is the most powerful means to develop competition in local wireline telephony, allowing CLECs to own an increasing

¹⁰⁷ For a description of how stock market bubbles have inflated and burst over the past three centuries, see Charles Kindleberger, *Manias, Panics, and Crashes*, Wiley Investment Classics, Fourth Edition, 2000.

¹⁰⁸ For a detailed discussion of this point, *see* J.P. Morgan Securities, Equity Research, *Telecom Services*, "A Fresh Look at the Industry" (Sept. 8, 2000).

share of the local exchange infrastructure relative to the ILECs while expanding wireline capacity in a local market overall.

Future: Technology Spawns Competition

While short-term disruptions in the financing of CLECs may slow the advance of competition in wireline telephony, the long-term prospects for competition in telephony look promising. Disruptive new technologies, the rise of the Internet Protocol as an increasing backbone to telecommunications, and deregulation are massively restructuring the telecommunications industry. A result of all these changes is a massive increase in telecommunications services and products that will be available to customers, along with a decreasing emphasis on wireline voice telephony.

Projections that telecommunications industry analysts at J. P. Morgan Securities made in September 2000 can provide a sense of the magnitude of these changes that may occur in the next five years, as shown in Table 27. J.P. Morgan Securities projects that revenues in telecommunications services nationwide will grow from \$246 billion in 1999 to \$422 billion in 2005. Wireline voice (local and long distance) revenues are expected to decline slightly between 1999 through 2005. As a percentage of total revenues, however, local wireline voice will fall from 33 percent in 1999 to 21 percent in 2005, and long distance wireline voice will fall from 32 percent in 1999 to 16 percent in 2005. In contrast, data services' share of total telecommunications revenues will rise from 12 percent in 1999 to 21 percent in 2005, and the Internet's share of total telecommunications revenues will rise from 4 percent in 1999 to 16 percent in 2005.

Table 27 – Forecast of Revenues in the Telecommunications Industry

	19	1999		5E
Service	\$ in Billions	Percent of Total	\$ in Billions	Percent of Total
Local Voice	87.8	33.0	92.6	20.8
Long Distance Voice	84.0	31.6	71.1	16.0
Wireless	40.0	15.1	100.1	22.5
Internet	10.5	4.0	69.7	15.7
Data Services	31.4	11.8	90.8	20.5
Other ILEC	11.9	4.5	19.8	4.5
Total	265.5	100.0	444.1	100.0

Source: J. P. Morgan Securities, Telecom Services Industry Analysis, September 8, 2000.

One trend influencing the direction of the industry is the rise of the Internet Protocol for delivering voice and data to customers. While Voice over Internet Protocol is not currently a viable alternative for local telephony, the indirect effects of this revolution are profound on telecommunications providers. Industry giants such as AT&T and SWBT are reorganizing business lines and altering their emphasis towards data and Internet services. Many analysts who follow the telecommunications industry believe

that voice telephony likely will become more of a commodity business, no longer sold as a separate service.

Another trend that will affect competitive delivery of voice telephony will be the alternatives to wireline discussed in Chapter 4. Growth in satellite, cable, and wireless services to customers will change the market structure of local telephone service by providing several means to deliver local telephone service. The locations where alternative providers offer these services would affect the level of competition across different areas of Texas. The number of CLECs on wireline in a rural area may not be as important as the opportunity for area customers to have several portals. In areas that currently have numerous CLECs on wireline, the competition will be even fiercer but not fully captured in the data of regulated telecommunications providers.

Competition Outlook

The Commission has implemented the Texas Legislature's framework for deregulating local voice service in Texas. As a result, CLECs have entered the Texas market in the past two years and have provided competition in certain regions of Texas.

The market for business customers in the Large Metro areas of Texas appears to be competitive. Facilities-based competition has provided increased capacity for CLECs to compete with ILECs over the long term. Monopoly power exists, however, in residential and rural markets in Texas. Key CLECs that were expected to challenge SWBT are now limiting their push into residential voice markets in Texas.

The Commission recognizes that differences in personal income and population density among various regions of Texas also affect where CLECs decide to compete for residential customers. At the same time, however, cross-subsidies that have traditionally kept residential rates artificially low have contributed to the lack of competition for residential customers.

The Commission believes that long term re-regulation of residential and rural markets should not be necessary, as new technologies could dislodge the monopolistic position of ILECs in certain areas of Texas in coming years.

CHAPTER 7: LEGISLATIVE RECOMMENDATIONS

1. Take Further Steps to Facilitate Local Exchange Competition in Texas

The 2001 Scope of Competition Report summarizes the path taken to open century-old monopolies as well as the use of new tools for facilitating competition that the Texas Legislature provided last session. As detailed above, the response has been good in some markets and disappointing in others. The conclusion today is that competition looks viable in the business and urban markets, but may not be as viable for certain rural and residential customers. The Report offers an economic diagnosis for why this pattern has developed, with the primary causes rooted in underlying market conditions and in the historical regulatory pricing system for local telephone service.

Texas has had a long-standing public policy to provide universal service and to maintain low rates for basic residential local service. However, continuing this policy means that some segments of the market may not receive rates that reflect the true cost of the service. In the short term, these segments - most notably residential and rural customers - may need protection from price increases if the market does not effectively moderate them. Indeed, further action may be necessary to ensure that competition comes to these markets at all. The Commission recognizes that short-term remedies are not long-term solutions in regulating a telecommunications industry that is rapidly evolving away from selling simple voice service.

There are a number of ways Texas can go from here. Approaches can be passive or active. The Commission suggests that the Legislature consider at least the following options for addressing the lack of competition in Texas local residential and rural markets:

Option A: Passive Erosion (no change to current pricing structures).

This is the de facto policy now in effect. If the market is left to behave freely under current policies, residential customers will continue to have low rates for basic service, but incumbent carriers likely will raise rates further on nonbasic services with little competition under the pricing flexibility granted in SB 560. The economic term for the process of aligning rates to reflect actual costs is called rebalancing. A benefit of allowing these rates to rise is that higher rates for the total set of residential services (even with basic service rates held artificially low) would provide CLECs incentives to offer competitive bundled service packages and to bring new technologies to more areas of Texas. As a result, CLECs may be able to erode the market share of incumbents over the long term.

However, a likely consequence of this approach is that CLECs will serve profitable high-end residential customers and the remaining customers, especially lowend residential and rural customers, may experience price increases for commonly used services for which there are no affordable substitutes at this time. So, while the bundled price of residential telephone services will move closer to its true cost, the burden of rebalancing prices would continue to be borne by the vertical services user, while basic local services remain subsidized below true cost. From the public's point-of-view, this arrangement may be preferable to having that burden be borne by all residential dial-tone customers.

Option B: Place a temporary, two-year price cap on popular nonbasic residential services that do not currently have competition, and evaluate whether further steps are necessary at the close of the cap to ensure competition in these markets.

This option borrows from both laissez-faire and regulatory economics. Placing caps on residential call forwarding, caller ID, and call return, - the prices of which have increased substantially since SB 560 became effective - would moderate the burden borne by residential customers during the transition to competition for local exchange markets.

Most residential and rural customers receive basic local services at rates well below their true cost (with the remainder of the cost subsidized by Texas and federal universal service payments and over-priced vertical or nonbasic services). The best hope many of these customers have for competition is from alternate technologies – such as wireless, satellite, or cable – that are not yet cost-competitive with landline basic local service. Landline local exchange competitors may never be competitive with incumbent-provided basic local service at current, subsidized rates. Therefore, the primary benefit of price caps on nonbasic services would be to temporarily protect residential customers from further price increases for services that have already seen large price increases. Such a strategy would allow the opportunity to see if the bundled local service package is priced high enough to allow more competitors to serve more residential and rural customers.

A disadvantage of this approach is that competitive providers need sufficient profit to fight for and win market share from incumbent carriers. Caps on vertical services will also affect competitors' profits slowing innovation in telephony services. At the present time, the Commission has observed that incumbent carriers are often charging prices for nonbasic services that are 5 to 10 times higher than their costs and, in an extreme case, 100 times higher than their costs. Capping prices at these levels would not limit opportunities for competitors to enter the market profitably.

Option C: Authorize and direct the Commission to hold a proceeding to rebalance costs into a structure that gives competitive providers the incentive to compete in residential and rural markets.

Most residential customers get a majority of their basic local services below cost. Rebalancing of rates would establish residential and rural rates that more closely, reflect the true costs of service. CLECs would have greater incentives to enter new markets in Texas with a wider range of sophisticated services for customers outside the large metro

areas. Higher, rebalanced local rates would give local service providers much more economic headroom to deploy advanced telecommunications technologies and services for rural and residential customers

This approach, however, has several drawbacks. After years of subsidized low rates, many customers would face increases in basic service rates as a result of rate rebalancing. Determining the proper, cost-based price for basic service in a given area would be difficult. Raising the rates for basic local services to meet costs might not permit competition anyway, as lower income and sparsely populated areas of Texas may never be profitable enough to attract competitors in traditional local service for reasons other than retail pricing.

Option D: Combine Options B and C

Combine Options B and C for a comprehensive solution that includes the short-term protection of price caps and the long-term incentives of rebalancing prices to more fully reflect costs. The advantage of this approach is that any negatives associated with the moratorium on certain residential service prices under Option B can be evaluated and adjusted in the course of rate rebalancing. Furthermore, such a proceeding and its implementation are likely to take most of the two years of the Option B moratorium. The cap on prices may mollify negative public reactions that otherwise could result from higher prices, while allowing residential and rural customers to reap the benefits of a wider range of telephone services in the future.

While one of these approaches may be desirable, the Commission believes that long-term re-regulation of residential and rural markets should not be necessary. While monopoly power is still a factor in residential and rural markets at this time, new technologies appear to have the potential to stimulate vigorous competition in a number of parts of Texas in the years to come. Until then, the Legislature's price cap on traditional phone services serves as an appropriate customer protection.

2. FACILITATE ACCESS TO FLAT-RATE LOCAL DIAL-TONE SERVICE FOR TEXANS IN UNCERTIFICATED SERVICE AREAS

Currently, numerous potential customers for local exchange telephone service do not have access to reliable, flat-rate dial-tone and other features of local exchange service because they are located in uncertificated service areas in Texas. Uncertificated service areas are areas where no telecommunications provider is obligated to provide telephone service. While all electric utility customers in Texas are served by at least one electric utility company, customers located in areas totaling approximately 10,000 square miles in Texas have no telecommunications provider obligated to provide access to dial-tone. This situation was created when the original service areas were established and no incumbent local service provider wanted to serve these rural and sparely populated areas. Following a twenty-five year period of growth, these previously uninhabited rural areas are becoming more populous.

The Commission regularly receives requests from residents in uncertificated areas to obtain dial-tone. Commission staff members have encountered instances of telecommunications providers refusing to connect potential customers to the network, even if the customer builds a line up to the provider's demarcation point. In addition to lacking access to reliable dial-tone service and emergency 9-1-1 service, these potential customers lack access to Internet service providers and advanced services. Because telecommunications providers are not currently required to serve uncertificated areas, Texas citizens are denied access to reliable, flat-rate dial-tone service, emergency 9-1-1 service, and the Internet. The only communications options that Texas citizens are afforded in uncertificated service areas are BETRS (radio), cellular, and satellite communications services. Even these options can be severely limited due to geographic dead spots in the coverage.

The Commission recommends that the Legislature consider the following two options for bringing reliable dial-tone to Texans located in uncertificated areas.

- (1) Authorize the Commission to assign each uncertificated area in Texas to a telecommunications provider with the understanding that funding from the Texas Universal Service Fund (TUSF) would be available for the recovery of certain costs associated with the provision of dialtone in uncertificated areas. The Commission notes that the optimal means for providing dial-tone to a particular area may depend upon a variety of geographic, economic, technological, and other areaspecific factors. Accordingly, assignment of this service extension would be made on a technology-neutral basis. Similarly, TUSF funding for the recovery of certain costs associated with providing dial-tone to the customer also would be considered regardless of the technology used to provide this service.
- (2) Give the Commission the responsibility to evaluate requests for dialtone from persons located in uncertificated areas and to authorize the Commission to require a telecommunications provider to provide dial-tone to a prospective customer, on a case-by-case basis. Again, the optimal means for providing dial-tone to a particular customer may depend upon a variety of factors best determined within the scope of each request. Consequently, the assignment and funding of this service extension would be made on a technology-neutral basis.

The Commission remains committed to a system of telecommunications in Texas that does not exclude citizens on the basis of location. If it is the intent of the Legislature to provide all Texans with access to reliable local exchange telephone service, including dial-tone, the Commission encourages adoption of one of these two options.

3. CLARIFY AND ENSURE COMMISSION AUTHORITY TO PROTECT PROPRIETARY INFORMATION

As deregulation is implemented, telecommunications providers and potential new entrants have more concerns about competitively sensitive information. Recent judicial

decisions and legislative revisions have left governmental bodies without the independent legal grounds necessary to seek protection of commercially sensitive information received from third parties. This inability to assure providers that such information will be protected from disclosure has hampered the Commission's ability to complete legislatively mandated reporting duties, such as the regular scope of competition reports and this year's reports on advanced services and switched access.

In the utility industry in Texas, the Legislature has carefully scripted the move from monopolies in the provision of telecommunications and electric services to competitive markets. It has also given the PUC duties, such as providing a scope of competition report, that require that the PUC be given access to commercially sensitive information in order that it might provide well-educated guidance on the movement of the market to competition. In the newly competitive market, the PUC has become the hunting ground for competitors to find commercially sensitive information about their competition. Without the ability to gather and protect commercially sensitive information, the PUC becomes a thorn in the side of competition.

As noted several times in Chapters 3 and 4 of this *Scope Report*, the Commission was either unable to gather the data it needed to prepare the *Scope Report*, or unable to gather it in the most useful format. Many entities expressed concern that the Commission could not protect the information once it became an agency document due to the recent change in Tex. Gov't Code § 552.110, and the Attorney General's letter ruling in OR2000-344 (February 2, 2000). 109

prior to the 76th Legislative session, Section 552.110 of the Texas Government Code allowed governmental bodies to protect commercial information obtained from third parties if the information was privileged or confidential by statute or judicial decision. In deciding whether such third-party information was excepted from disclosure under § 552.110, the Attorney General applied the two-prong test set out in *National Parks Conservation Ass'n v. Morton*, 498 F.2d 765 (D.C. Circuit 1974). DM-ORD 639 (1996). *National Parks* allowed governmental bodies to protect third-party commercial or financial information if disclosure would be likely to impair the government's ability to obtain necessary information in the future, or would cause substantial harm to the competitive position of the person from whom the information was obtained.

In a later D.C. Circuit case, Critical Mass Energy Project v. Nuclear Regulatory Commission, 975 F.2d 871 (D.C. Circuit 1992) cert. denied, 507 U.S. 984 (1993), the court found that the National Parks two-prong test should apply only to commercial or financial information that third parties are required to file with governmental bodies. The court further found that information submitted voluntarily should only be excepted from disclosure if the information is of a kind that the provider would not customarily make available to the public, under 5 U.S.C. § 552(b)(4). Critical Mass II, 880.

In 1999, the Austin Court of Appeals effectively overruled the application of the *National Parks* test in DM-639 (1996) when it found that *National Parks* is not a judicial decision within the meaning of the [former] § 552.110, Gov't Code. *Birnbaum v. Alliance of Am. Insurers*, 994 S.W.2d (Tex App.--Austin 1999, pet. denied). Thus, under the current Texas Public Information Act, § 552.110, financial and commercial information would not excepted from disclosure by applying the *National Parks* test alone.

By SB 1851 in the 76th Regular Legislative Session, the Legislature revised § 552.110 to cure in part the void left by the *Birnbaum* decision. The revised § 552.110 does not address the governmental body's inability to obtain information from third parties that those parties deem commercially sensitive. The Commission has run head long into the void left by this combination of judicial decisions and legislative action.

To mitigate this problem, the commission seeks revision of § 552.110 of the Texas Government Code to provide governmental bodies with an independent ground for asserting the exception for commercially sensitive information. In particular, § 552.110 should be revised to allow a governmental body to protect third-party information from disclosure *if* disclosure is likely to impair the governmental body's ability to obtain necessary information in the future *and* if the information is not customarily released to the public by the person from whom it was obtained.

An exemption for governmental bodies to protect commercial material is justified in that it protects the rights of those who are required to provide commercially sensitive information to a governmental body and it encourages cooperation from those entities that are not required to provide the information. By revising § 552.110 as suggested, governmental bodies will have a basis to assert an exception for not disclosing information that it has received from third parties, whether voluntarily or not. The burden will first be on the governmental body to prove that it needs the information and that the third party does not customarily make the information available to the public.

The aggregated data that the Commission used as the basis for Chapter 3 was a blunt but sufficient instrument for the purposes of this current *Report*. These purposes were primarily to identify broad competitive trends in basic local services in the infancy of competition, where competitive providers focused on serving business customers in four metro areas in Texas. However, as the market in local basic service evolves in the next five years the Commission will need more refined data to better understand the dynamics of competition in Texas. Having access to a more complete set of data in future scope of competition reports will help the Commission better understand the Texas market. As a result, the Commission will be able to identify and implement better practices and provide more specific recommendations to the Legislature concerning the dynamics of competition in local service.

The Commission can identify a number of examples of where the data collection instrument would be insufficient for analysis in future Scope Reports. Staff needs the ability to change the data groupings to reflect the findings of its research. For example, regional analysis of competitive providers can yield an important insight into the extent of competition. For data confidentiality reasons in this report, the Commission allowed data to be aggregated for urban regions of a certain population size, which allowed the following cities into the same category: Austin, Dallas, El Paso, Houston, and San Antonio. Unfortunately, staff subsequently determined from other sources that competitive providers did not enter El Paso as aggressively as they did the other four cities, but staff could not regroup the data to put the four cities in a new category and assign El Paso into a more appropriate group.

Further, the Commission needs the ability to analyze individual counties and the competitive providers operating therein. For instance, when staff discovered that a number of coops in west Texas filed to become competitive providers, it consulted survey data, which showed that competitive retailers had gained a larger market share in the Texas Panhandle than in other rural areas of Texas. Staff suspected that some of these coops were winning market share in the Texas Panhandle, but, without direct access to the data, Staff could not determine which coops were winning market share. With that

knowledge, staff could have, on a confidential basis, interviewed these providers to better understand how the Commission could promote competition in rural areas of Texas.

The Commission also could not calculate the common market share index known as the HHI on the basis of data collected through the Commission's data request. Large IXCs were not willing to let the ILECs report to the Commission information on originating minutes of use, which was needed to calculate an HHI for intrastate long distance. Commission staff finally obtained the information from the biggest ILECs (but not the others), but only after much persistence, involving coordination with both those ILECs and the big IXCs.

Information needed by the Commission to conduct industry analyses and to provide a full picture of the utility markets in Texas can only be obtained from utility companies, some of which are no longer regulated entities. The Commission has no authority to require certain entities, like municipal power companies, to provide data to the commission, but the Commission nonetheless needs the data in order to fulfill its statutory duties. Accordingly, § 552.110 should be revised as noted above to give the PUC and other governmental bodies an independent ground upon which to base a request for an exception to disclosure for information that has been provided a governmental body, whether voluntarily or involuntarily.

4. CLARIFY THAT TELECOMMUNICATIONS PROVIDERS HAVE BURDEN OF PROOF IN SLAMMING AND CRAMMING COMPLAINTS

In contested cases concerning slamming complaints, the Commission has encountered disputes as to whether and how a utility must demonstrate that it has complied with PURA and Commission rules for authorizing a change in a customer's preferred carrier.

The Commission recommends that PURA be clarified to require that a telecommunications utility initiating a switch in the customer's preferred carrier be required to demonstrate that it complied with the provisions in PURA and commission rules in order to refute any allegation of slamming (unauthorized switch) or of cramming (unauthorized charges).

Such clarification regarding slamming could be made in PURA by adding language such as the following to PURA § 55.309.

• Upon a showing that a telecommunications utility has failed to respond or provide proof of verification in accordance with the requirements in this Subchapter and commission rules, the burden of proof shall be on the telecommunications utility initiating a switch in a customer's preferred telecommunications utility to provide clear and convincing evidence that the switch was authorized in accordance with such requirements.

Adding he following language to PURA § 17.159 could achieve a similar result with respect to cramming.

• Upon a showing that a telecommunications utility has failed to respond or provide proof of verification in accordance with the requirements in this

Subchapter and commission rules, the burden of proof shall be on the telecommunications utility imposing the charges for a product or service to provide clear and convincing evidence that the charges were authorized in accordance with such requirements.

5. GRANT 9-1-1 COMMISSION SUFFICIENT AUTHORITY TO ACCOMPLISH ITS MISSION

The inability of the Commission on State Emergency Communications (CSEC or the 9-1-1 Commission) to manage and control deadlines for the installation and testing of equipment between the local telephone companies and wireless carriers has delayed the availability of advanced emergency capabilities offered by enhanced 9-1-1 (E911) systems.

The 76th Texas Legislature passed H.B. 1983, which gave the CSEC the responsibility for implementing wireless Phase I 9-1-1 services for at least 75% of the population served by the State program. This implementation was to be completed on or before August 31, 2000. CSEC did not meet this deadline.

Specifically, CSEC encountered problems getting certain ILECs, CLECs, and wireless companies to place and fulfill trunk orders and to begin and complete the testing and implementation process necessary to complete Phase I service. CSEC does not have the necessary jurisdiction over the telecommunications carriers to require compliance with the Phase I requirements. CSEC must rely on the Commission and the FCC for enforcement purposes.

Although the Commission worked closely with CSEC to help with deployment of Phase I in Texas, the implementation is still not complete. Specifically, the Commission worked with regulated carriers to ensure that trunks ordered by wireless carriers were installed and tested to meet the deadline set by HB 1983. As a result, wireless Phase I 9-1-1 service was deployed in Texas covering 80.6% of the population served by the state program, as of December 14, 2000.

Under Phase I, 9-1-1 systems must deliver the phone number of the handset from which an emergency call originates and the location of the base station carrying the call to the 9-1-1 operator. Under Phase II, 9-1-1 systems must locate handsets within a radius of 125 meters with a success rate of 67 percent. The requirements for Phase II do not take effect until October 1, 2001.

In order to assist CSEC in completing its Phase I and Phase II wireless implementation projects, the Commission recommends that the Legislature grant CSEC limited jurisdiction over ILECs, CLECs, and wireless telecommunications providers. This limited jurisdiction would include enforcement powers to assess administrative penalties in order ensure full compliance in the Phase I and Phase II 9-1-1 wireless implementation projects and other 911-related projects and activities in the future.

Other Commission Recommendations

In other legislatively mandated reports, the Commission has discussed and made the following recommendations:

ADVANCED SERVICES REPORT RECOMMENDATIONS

1. Recommended Objectives for Public Policy

Establish a goal that all Texans have access to advanced services by a date certain to meet policy goals set in state and federal legislation

Encourage deployment of advanced services to rural Texans in a technology neutral manner for cost-effectiveness

Avoid Excessive and Intrusive Regulation

Encourage Local Solutions

Avoid "One Size Fits All" Solutions

2. Specific Policy Alternatives to Encourage Deployment

Expand Data Collection Activities

Implement Demand Aggregation

Implement Anchor Tenancy

Encourage Community Networks

Provide Community Internet Access And Training To "At Risk" Populations

Use Economic Development Funds for Rural Telecommunications Infrastructure Investment

Provide Tax Incentives for Deployment

Deploy Fiber Optic Cables in the State's Rights of Way

Allow Private Access in Limited Situations to the TEX-AN 2000 Infrastructure

Provide Narrow Exception for Rural Municipal Governments to Provide Advanced Services

Enhance Statewide Telecommunications Strategic Planning

SWITCHED ACCESS REPORT RECOMMENDATIONS

Provide the statutory ability for the Commission to restructure access charges and reduce access charge revenues for Chapter 58 and 59 ILECs

Authorize the Commission to hold a combined proceeding, rather than separate ones for each company, to restructure and reduce access charges for small incumbent local companies and cooperatives

Extend the expiration date of PURA Section 52.112 in order to ensure corresponding customer protections resulting from switched access charge reductions

APPENDIX A: UNIVERSAL SERVICE

One of the primary historical goals of telecommunications regulation has been to ensure universal service, *i.e.*, that all customers have access to affordable telecommunications service. Section 254 of the federal Telecommunications Act of 1996 (FTA) contains provisions designed to ensure universal service within the environment of competitive local telephone service. The FCC names universal service as one of the three pillars of the FTA trilogy for competition.

A measure of the success of universal service support programs is the overall subscribership to telephone service. The FCC, with the assistance of the U.S. Census Bureau, monitors the percentage of households with telephone service, as reflected on the chart below. While Texas remains below the national average, our state continues to show improvement in subscribership.

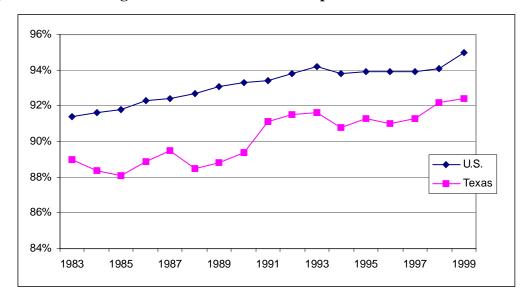


Figure 15 – Percentage of Households With a Telephone

Universal Service Programs In Texas

The 70th Texas Legislature established a Universal Service Funding (USF) mechanism for Texas through amendments to PURA in 1987. Statutory changes were

made to the Texas USF programs in subsequent years. The current Texas USF program is described in Chapter 56 of PURA, and consists of the following major components:

- Support for targeted lifeline services (such as Tel-Assistance),
- Support for a telecommunications relay service for the hearing- or speech-impaired (Relay Texas),
- Support for the specialized telecommunications assistance program,
- Support for the provision of high-capacity (T-1) services to certain entities (e.g., educational institutions, libraries, and others), and
- Support for the provision of basic telecommunications service in high cost rural areas.

USF Program Disbursements	FY 1999 (Actual)	FY 2000 (Actual)	FY 2001 (Estimated)
High Cost Fund – Non-Rural Telcos	0	383,546,184	442,467,500
High Cost Fund – Small Rural Telcos	38,084,091	94,087,265	99,257,517
Small Telco Recovery - PURA §56.025	2,965,448	4,448,171	4,448,172
Lifeline and Tel-Assistance Programs	2,487,056	11,653,838	12,136,601
Reduced Rate T-1s for Certain Entities	0	739,599	838,100
Relay Texas Program	6,816,004	10,007,130	10,609,650
Specialized Telecom Assistance Program	322,420	578.402	716.171

Table A-1: Texas' Universal Service Fund Program Disbursements

High-Cost Support

In January 2000, the Texas PUC formally implemented revisions to the Texas High Cost Universal Service Plan (THCUSP) portion of the Texas Universal Service Fund. The THCUSP provides support to eligible telecommunications providers that serve the high cost rural areas of the state. Two separate mechanisms are used: one for non-rural carriers, and another for small and rural ILECs.

The program for non-rural carriers provides that the THCUSP will support basic local telecommunications service provided by an eligible carrier in a high cost rural area that is carried over all flat-rate residential lines and the first five flat rate single-line business lines at a business customer's location. Under the rule, support is competitively neutral; therefore, support for a customer location is portable across providers. Generally, the amount of support available to each eligible carrier is based on a comparison of the forward-looking economic cost (calculated using a cost proxy model) to specific revenue benchmarks. To avoid a windfall as a result of implementation of the THCUSP, the PUC's rules require equivalent rate reductions.

The PUC recognized that state and federal statutes place small and rural carriers on a different competitive footing than other carriers, and therefore established a separate

mechanism to enable the small and rural carriers to prepare for the advent of competition in local telephony and the transition to the THCUSP. Specifically, the PUC's rules establish guidelines for determining per-line support amounts for each study area, ensuring the provision of basic local telecommunications service at reasonable rates in a competitively neutral manner in those areas of the state. Monthly per-line support for each eligible small/rural carrier consists of the sum of (1) the amount necessary to replace support previously provided by the intraLATA toll pool and (2) the loss of revenue realized by the carrier upon implementing Commission-ordered switched access and intraLATA toll rate reductions.

In addition to the THCUSP, several small ILECs are eligible for support under PURA § 56.025. This portion of the USF was designed to ensure recovery of revenues that resulted from regulatory actions prior to 1998, and also to compensate carriers for other revenue shortfalls resulting from regulatory actions.

Tel-Assistance and Lifeline Service

Tel-Assistance Service is a telecommunications service assistance program that provides low-income residential customers with a reduction in the price of their basic local exchange service. Eligible customers receive a 65% reduction in their applicable basic monthly local exchange service rate. The Texas Legislature created this program in 1987, and it is codified in PURA §\$56.071-56.079. As of October 2000 there were 42,612 households receiving Tel-Assistance support. The amount of revenue support received from the Texas USF by companies providing Tel-Assistance discounts was \$2,925,587 for the fiscal year ending in August 2000.

All ILECs in Texas and any CLEC receiving TUSF now offer Lifeline Service. Lifeline Service allows eligible residential customers to receive a total discount on their monthly local exchange service rate of \$11.35. The discount is funded through Federal USF and Texas USF support. More than 209,230 households in Texas receive monthly Lifeline Service discounts. The Texas USF revenue support for Lifeline Service was \$8,728,251 for the fiscal year ending in August 2000.

In addition to monthly support, Link-Up Service, an adjunct federal program to Lifeline Service, provides a partial waiver of non-recurring residential installation charges for local service up to \$30.00. Link-Up Service support is included in the figure for Lifeline Service support shown above.

As a result of interstate and intrastate merger agreements, SWBT and Verizon will be initiating supplemental Lifeline Service support programs in 2001 for a 36-month duration. SWBT's Lifeline USA and Verizon's Alternative Lifeline Service will provide eligible residential customers with a complete waiver of local service installation fees. Both programs incorporate public outreach, including commercial advertisements, in an effort to increase eligible participants' opportunities to connect new telephone service.

Relay Texas Program

In 1989, the Legislature authorized a telecommunications relay service (TRS) in Texas and directed the Commission to supervise its provision. The name "Relay Texas" was coined for the Texas TRS. Relay Texas is available 24 hours a day, 365 days a year, with no restrictions on the length or number of calls placed. In September 1990, the first month of operation, Relay Texas processed nearly 50,000 relay calls; by September 2000, the number of calls had increased to an average of over 415,000 per month. Relay Texas has led the nation in improving the quality of TRS, with such enhancements as voice-carry-over, speech-to-speech, Texas Video Interpreting Service, a customer database, Spanish interpreting, and other new features. Pursuant to PURA, TRS is provided by a designated carrier and funded by a surcharge on all telecommunication providers through the USF. Using a request-for-proposal process, the Commission selects a vendor based on such key criteria as price, service quality, and availability over a five-year term. The Commission awarded five-year contracts to Sprint Communications Company, L.P. (Sprint) for Texas in 1990 and in 1995. Sprint has again been selected as the preferred vendor, and the new contract is under negotiation. The new contract will expire in 2005.

A model for competition in the provision of TRS is difficult to discern, but interest in creating a competitive market in this area has increased. AT&T, Sprint, and Hamilton provide the vast majority of TRS at both the state and national level, although there are several other smaller telephone companies providing TRS in a few states. Based on experience thus far, it is unclear whether the TRS market in any one state can support multiple TRS providers. California experimented with TRS multi-vendoring by releasing a Request for Proposals with the understanding that whichever proposer had the lowest bid would be allowed use of the existing 800 relay numbers. Other qualified TRS providers were welcome to provide TRS in California, provided that they too billed at the same low bid price. MCI was awarded the California 800 TRS numbers. AT&T refused to offer TRS, arguing that the price per minute was too low. Sprint countered with a proposal for California to combine all the prices and use the average bid price. California agreed and Sprint participated. Last month, MCI advised authorities that it could no longer provide service at the current price, and offered a non-negotiable price per minute. California rejected MCI's offer. Sprint also proposed a new, higher price per minute, which is still under consideration.

In the past, the five-year contract term used by the Commission limited the ability of Texas TRS to keep up with technological advances because the incumbent vendor had no incentive to offer a competitive price. In 1999, the Texas Legislature passed a bill amending the Relay bill by allowing the Commission to seek other vendors for special features of the relay service if the incumbent provider is unable to provide the feature at the best value for the state. This amendment has helped to ensure that special services can be sought at a competitive price from another TRS provider if the incumbent TRS provider is not able to offer a reasonable price.

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¹¹⁰ Now codified in PURA §§ 56.101-112.

Specialized Telecommunications Assistance Program (STAP)

A new program initiated by the Texas Legislature in 1997 was created to provide financial assistance to persons with disabilities to purchase special telecommunications equipment. The new program, called the Specialized Telecommunications Assistance Program (STAP), is coordinated by two agencies: the Texas Commission for the Deaf and Hard-of-Hearing (TCDHH) and the PUC. The PUC is responsible for registering and reimbursing vendors from the TUSF. TCDHH is responsible for the bulk of operations, from developing applications, to approving equipment, to issuing vouchers. Texas uses a voucher system under which qualified persons pay a \$35 application fee and receive a voucher to purchase the telecommunications equipment. Unlike in many other states, the equipment becomes the property – and responsibility – of the purchaser. Approved products, such as TTYs, amplified phones, speech aids, and video software, assist persons with a wide variety of disabilities in using the telephone, some for the very first time. More than 5,700 telecommunications vouchers have been issued to persons with disabilities since the inception of the STAP in 1998.

Federal Universal Service Programs

One of the primary purposes of universal service support is to allow ILECs and other eligible telecommunications carriers to provide certain basic services to customers in high-cost areas without having to charge these customers unaffordable rates. Historically, in the interest of meeting the goal of universal service, ILEC services have been supported or subsidized to enable high-cost consumers to be served at rates that are reasonably comparable to those in lower cost areas. This universal service support has been both explicit and implicit.

Explicit Support. Several federal programs have provided explicit universal service support in the form of direct monetary payments to carriers. This support has been provided for both intrastate and interstate services. For example, the FCC's high-cost support mechanism provides support for the costs of the intrastate portion of the local loop that significantly exceed the national average. By providing this federal support for intrastate costs, the FCC assists the states in ensuring that rates for intrastate rates remain affordable and reasonably comparable.

Implicit Support. In addition to receiving explicit universal service support, ILECs also received implicit universal service support from a variety of sources. Some rate structures have permitted ILECs to charge rates for certain services that significantly exceeded the costs of providing those services, thereby enabling those ILECs to charge below-cost rates for other services. For example, the practice of averaging rates over large geographic areas, for both intrastate and interstate services, results in subscribers in low-cost areas subsidizing the rates of subscribers in higher cost areas.

This "patchwork quilt" of implicit support helped keep rates largely affordable in a monopoly environment, where ILECs could be guaranteed an opportunity to earn returns from certain services and customers that are sufficient to support the high cost of providing other services to other customers. The new competitive environment envisioned by the FTA, however, threatens to undermine this implicit support structure. The FTA removed barriers to entry in the local market, generating competitive pressures that may make it difficult for ILECs to maintain charges above economic cost.

Recognizing the disruptive effects that competition would have on universal-service support mechanisms developed in a monopoly environment, Congress instructed the FCC, after consultation with the Federal-State Joint Board on Universal Service (Joint Board), to establish specific, predictable, and sufficient mechanisms to preserve and advance universal service. Congress concluded that the support provided by these mechanisms "should be explicit and sufficient to achieve the purposes" of section 254, which include the purpose that all Americans should have access to telecommunications services at affordable and reasonably comparable rates. In response to this directive, the FCC has taken several actions to put universal-service support mechanisms in place that will be sustainable in an increasingly competitive marketplace.

In 1999, the FCC approved the Joint Board's recommendation for significant changes to the methodology used to compute high-cost support for *non-rural* carriers. The FCC adopted a mechanism that uses a forward-looking economic cost model to determine the support needed by carriers in high-cost states. The Joint Board and FCC are currently evaluating the needs of rural carriers, and reviewing the recent report of the Rural Task Force, with decisions to come in early- to mid-2001.

In addition to federal high cost support programs, the FCC has established a program for eligible schools and libraries to receive support for telecommunications services. The entities may obtain discounts on services, including Internet access and internal connections at discounts ranging from 20 to 90 percent. Another portion of the federal USF program provides support for rural health care providers to purchase telecommunications services at the same rates that health care providers in urban areas pay for those services.

Disbursements from the federal USF programs are shown in the following table.

Federal USF Program Disbursements	1998	1999
Total High Cost Support	\$122,103,519	\$119,556,528
Low Income Programs (Combined)	\$19,868,956	\$22,640,550
Schools & Libraries Funding	\$129,802,466 (1/1/98-6/30/99)	\$135,913,941 (7/1/99-6/30/00)
Rural Health Care Funding Commitments	\$15,749 (1/1/98-6/30/99)	\$35,068 (7/1/99-6/30/99)

Table A-2: Federal Universal Service Fund Program Disbursements to Texas Entities

Source: Universal Service Monitoring Report, CC Docket No. 98-202, Federal-State Joint Board on Universal Service, September 2000.

APPENDIX B: ACCESS CHARGES

In passing the Telecommunications Act of 1996 (FTA), Congress sought to establish "a pro-competitive, deregulatory national policy framework" for the United States telecommunications industry. In the FTA, Congress also directed that universal service support "should be explicit and sufficient to achieve the purposes" of section 254, which includes the purpose that all Americans should have access to telecommunications services at affordable and reasonably comparable rates. According to the FCC, implementation of the FTA required a trilogy of separate but related proceedings addressing regulatory reform in three important subjects: interconnection, universal service, and access charges. This appendix gives a brief overview of recent federal and state activity related to access charges. For additional information, the reader should refer to the *Report to the 77th Texas Legislature on Intrastate Switched Access Rates*, PUC Project No. 21168.

For much of this century, most telephone subscribers obtained both local and long-distance services from the same company, the pre-divestiture Bell System, owned and operated by AT&T. In the 1970s, MCI and other long distance carriers began to provide switched long-distance service in competition with AT&T. AT&T, however, still maintained monopolies in the local markets served by its local subsidiaries, the Bell Operating Companies (BOCs). The BOCs owned and operated the telephone wires that connected the customers in their local markets. Other independent (non-BOC) LECs held similar monopoly franchises in their local service areas. MCI and the other IXCs were dependent on the BOCs and the independent LECs to complete long-distance calls to the end user.

In 1983, following the decision to break up AT&T, the FCC adopted uniform rules governing the fees -- the access charges -- that long distance carriers should pay the local exchange carriers for originating and terminating interstate calls placed by or to end users on the local networks.

With the passage of the FTA, the FCC determined that it was necessary to make substantial revisions to access charges. In an attempt to more closely align the rate structure with the manner in which costs are incurred, the FCC initially shifted cost recovery from the carrier common line (CCL) access charge to the presubscribed interstate carrier charge (PICC), a flat per-line charge imposed by the local carrier on an end user's IXC. That plan was relatively short-lived, as customers were subjected to higher bills, and long distance charges were not reduced as much as expected.

According to the FCC, "[u]ndoing the Gordian knot of determining the appropriate level of interstate access charges and converting implicit subsidies in interstate access charges into explicit, portable, and sufficient universal service support cannot be accomplished with one stroke of the sword." After years of disputes and concerns over the structure and levels of access charges, the FCC adopted further

modifications in May 2000, designed to balance various and sometimes conflicting interests – including promotion of competition, deregulation, maintaining affordability for all, and avoiding rate shock to consumers. The FCC adopted an integrated interstate access reform and universal service proposal for price-cap LECs put forth by the members of the Coalition for Affordable Local and Long Distance Service (CALLS). The CALLS proposal was designed to remove implicit subsidies from the interstate access charge system and replace them with a new interstate access universal service support mechanism that supplies portable support to competitors.

The FCC's *CALLS Order* combined two phone bill charges - the existing presubscribed interstate carrier charge and the subscriber line charge - into one line item. The FCC indicated that consumers would see savings through this plan, since long distance carriers committed to passing through access reductions to customers. As part of the plan, AT&T and Sprint agreed to eliminate from their basic rate plans the monthly minimum usage charges customers were paying whether or not they made any calls. The *CALLS Order* removed \$650 million from access charges and replaced that revenue amount with a special "USF" assessment on all carriers' interstate revenues. The revenue from this assessment is available to any carrier serving customers in high-cost areas.

Texas' switched access rates were adjusted prior to 1999 in company-specific rate cases, and in an industry-wide access reform rulemaking that eliminated the interexchange carrier access charge, shifting that revenue requirement to the CCL and other charges for individual local telephone companies. Because the intrastate usage-based switched access rates were very high to begin with and no additional flat rate charge was employed, the significant reductions from these cases still leave intrastate switched access rates very high when compared to interstate rates.

Switched access rates have been significantly impacted in Texas during the last two years as a result of activities related to the Texas Universal Service Fund (TUSF) and PURA requirements. During the last half of 1999 and into the third quarter of 2000, the Commission made significant changes to the TUSF. In conjunction with PURA Section 58.301, the Commission implemented changes that substantially reduced the rates for switched access of a majority of the ILECS in Texas. The PURA required Southwestern Bell Telephone Company to reduce its combined originating and terminating switched access charges by one cent per minute in September of 1999 and by an additional two cents per minute in July of 2000. This combination reduced the cost of switched access in SWBT territory by approximately twenty-five percent.

Additional access reform for Texas' intrastate switched access rates is described in greater detail in the Report to the 77th Texas Legislature on Intrastate Switched Access Rates.

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¹¹¹ Cases concluded in 1986 and 1990 for Southwestern Bell, and less frequently for other ILECs.

¹¹² Rulemaking Project No. 7205.

¹¹³ As an example, SWBT's composite switched access rate went from approximately 12.2 cents to 6 cents per minute, for a reduction of over 50%. Appendix B provides a summary and comparison of the composite switched access rates for all of the states.

Appendix C - 911 103

APPENDIX C: 9-1-1

The inability of wireless customers to benefit from the advanced emergency capabilities of enhanced 9-1-1 (E911) systems available to most wireline customers has been the predominant topic in the 9-1-1 industry in recent years. Most wireline phones are connected to E911 service that automatically reports the caller's location when 9-1-1 is dialed. On the other hand, when a 9-1-1 call is placed using a wireless handset, the dispatcher at the 9-1-1 Public Safety Answering Point (PSAP) does not know where the caller is. In 1996 the Federal Communications Commission (FCC) mandated the implementation and deployment of wireless enhanced 9-1-1 features and functions in two phases, to enable wireless callers to have the same benefits as wireline callers. Under Phase I, 9-1-1 systems must deliver the phone number of the handset from which an emergency call originates and the location of the base station carrying the call to the 9-1-1 operator. Under Phase II, 9-1-1 systems must locate handsets within a radius of 125 meters with a success rate of 67 percent. The requirements for Phase II do not take effect until Oct. 1, 2001.

The 76th Texas Legislature passed H.B. 1983, which gave the Commission on State Emergency Communications (CSEC) the responsibility for implementing wireless Phase I 9-1-1 services for at least 75% of the population served by the State program. This implementation was to be completed on or before August 31, 2000. The Commission worked closely with CSEC to help with deployment of Phase I in Texas. Specifically, the Commission worked with regulated carriers to ensure that trunks ordered by wireless carriers were installed and tested to meet the deadline set by H. B 1983. As a result, wireless Phase I 9-1-1 service was deployed in Texas covering 73.8% of the population served by the state program.

With the entrance of new competitors into the telecommunications market and the implementation of wireless Phase I service, the Commission has been faced with finding regulatory solutions to many other 9-1-1 issues. For example, the entrance of an alternative statewide 9-1-1-database provider has raised many issues, such as proprietary customer information being disclosed and 9-1-1 entities being able to buy network and database services from different vendors at reasonable prices. The Commission conducted a rulemaking and held many proceedings to ensure that the citizens of Texas will be protected through a 9-1-1 network that works efficiently and effectively in a competitive telecommunications market. As a result the Commission adopted P.U.C. SUBST. R. § 26.433, relating to the Roles and Responsibilities of 9-1-1 Service Providers. This rule establishes specific reporting and notification requirements and mandates certain standards for network interoperability, service quality, and database integrity. These requirements are in addition to the minimum interconnection parameters for E911 contained in P.U.C. SUBST. R. § 26.272.

As a result of proceedings and rulemakings over the last year, Texas citizens should benefit from improvements in 9-1-1 service while using cellular phones. Still, much more work needs to be done to ensure the reliability of the state's emergency 9-1-1 system in a competitive telecommunications environment. The Commission is currently conducting proceedings to approve E911 tariffs filed by Southwestern Bell Telephone Company (SWBT) and Verizon Communications (formerly known as GTE Southwest, Inc.). The Commission is currently conducting proceedings to approve E911 tariffs filed by SWBT and Verizon Communications.

APPENDIX D: PAY TELEPHONES

To promote further competition in the payphone industry, the FCC in 1996 deregulated coin rates for all local calls made from payphones. That same year the PUC began to register and certify payphone service providers, as required by the revisions to PURA in 1995. Pay Telephone Rules were reviewed and readopted pursuant to the Government Code Procedures Act. Revision of P.U.C. SUBST. R. § 23.54 incorporated the Commission's authority, granted under Senate Bill 86, to revoke a provider's certificate for violation of Commission's rules and carry out the sunset review process. 114

Data show that local telephone companies have been reducing their involvement in the payphone business. The number of payphones that ILECs provided declined from 90,200 in 1998 to 86,400 in 1999, while the number of lines provided to competitive payphone providers fell from 56,300 in 1998 to 46,500 in 1999.

Table 28 – Pay Telephones in Texas

	1998	1999
Number of payphones provided by incumbent local telephone companies:	90,193	86,404
Number of loops provided by local telephone companies to competitive payphone providers:	56,316	46,492
Total number of payphones:	146,509	132,896
Payphones provided by competitive payphone providers, as percent of total payphones:	38.4%	35.0%

Source: Public Utility Commission of Texas Data Request

Registration of Pay Telephone Service Providers; P.U.C. SUBST. R 26.341 General Information Relating to Pay Telephone Service (PTS); P.U.C. SUBST. R 26.342 Pay Telephone Service Tariff Provisions; P.U.C. SUBST. R 26.343 Pay Telephone Service of Certificated Telephone Utilities holding Certificates of Convenience and Necessity; § 26.344 Pay Telephone Service Requirements; § 26.345 Posting Requirements for Pay Telephone Service Providers; § 26.346 Rates and Charges for Payphone Service; and P.U.C. SUBST. R 26.347 Relating to Fraud Protection for Pay Telephone Service.

APPENDIX E: Numbering Issues

AREA CODE ACTIVITY

During this reporting period (January 1999 – December 2000), the Commission has seen several changes in area code activity. The primary reason for the recent changes has been a drastic increase in technology that utilizes numbers. Pagers, faxes, personal and multiple telephone lines have all contributed to a sharp growth in the number of central office 3-digit prefixes (NXX codes) needed by carriers. As Table 29 illustrates, the boom in area code growth in Texas has occurred mostly over the previous five years.

The Commission has reacted to the exhaustion of area codes by splitting area codes or overlaying one area code with another. Splitting an area code simply requires breaking up a full area code into two or three smaller codes, with one area keeping the original code and new area code(s) being assigned to the other area(s). An overlay entails the assignment of a new area code over the same geographical area as the current code. The outcome of an overlay is ten-digit dialing, that is, customers must dial the area code and the seven-digit number for all local calls. Toll, or long distance, calls are then made by dialing a "1" before the area code and phone number.

Table 29 – Texas Area Code Chronology

1947	4 area codes
1941	214 – Northeast Texas
	512 – Central and South Texas
	713 – Southeast Texas
4050	915 – West Texas
1953	5 area codes
	817 – a geographic split of the Fort Worth region from 214
1962	6 area codes
	806 – a geographic split of the Amarillo/Lubbock region from 915
1983	7 area codes
	409 – a geographic split from 713
1990	8 area codes
	903 – a geographic split of the Longview region from 214
1992	9 area codes
	210 – a geographic split of San Antonio from 512
1996	11 area codes
	972 – a geographic split of the 214 area code serving the Dallas region
	281 – a geographic split of the 713 area code serving the Houston region
1997	15 area codes
	254 and 940 – a three-way geographic split of 817
	830 and 956 – a three-way split of 210 with San Antonio retaining that area code
1998	15 area codes
	The geographic boundary between 214 and 972 in Dallas is erased, creating the first
	overlay in Texas. Ten-digit dialing is required for local calls.
1999	18 area codes
	The geographic boundary between 713 and 281 in Houston is erased, creating an
	overlay and requiring ten-digit dialing for local calls.
	831 – an overlay added as the third Houston area code
	361 – a geographic split of 512 creates a new area code for the Corpus Christi region
	469 – an overlay added as the third Dallas area code
2000	21 area codes
	979 and 936 - a three-way split of 409 with Beaumont retaining that area code
	682 – an overlay added to 817 for Fort Worth and part of Northeast Texas

Source: Public Utility Commission of Texas

The following is a summary of the major actions taken by this Commission with respect to the area codes in Texas.

- 214, 469, and 972: On December 5, 1998, mandatory ten-digit dialing for both the 214 and 972 area codes began. These area codes began as a concentrated overlay and, in December, the split between the two codes was eliminated, creating a single area served by the 214 and 972 area codes. Due to high demand for numbers in the Dallas metropolitan area, on July 1, 1999, a third area code, 469, was introduced to cover the same area as 214 and 972.
- **281, 713, and 832:** Area code relief in the Houston metropolitan area was along the same lines as that in the Dallas area described above. On January 16, 1999, the split between 281 and 713 was eliminated, and a new area code, 832, was introduced to cover the same area as 713 and 281.
- **409, 936, and 979**: To delay the need for an overlay and ten-digit dialing, on October 13, 1999, the Commission approved a three-way geographic split

of the 409 area code. Beaumont, Galveston, Port Arthur and Texas City retained the 409 area code. Conroe, Huntsville, Lufkin, and Nacogdoches took the new 936 area code, and 979 was assigned to Bay City, Brenham, Bryan, College Station and Lake Jackson. As of August 5, 2000, new area code usage became mandatory.

- **361 and 512:** Due to the amazing rate of growth in this area code, on October 16, 1999, the Corpus Christi area was split from the 512 area code and was assigned the new area code of 361. Thereafter, even though the 512 area code encompassed mostly the Austin metro area, it again quickly approached a jeopardy situation and was slated for exhaust in the third quarter of 2003. To extend the life of the 512 area code, on March 29, 2000, the Commission issued an order implementing thousand block number pooling in the 512 area code. Simultaneously, to comply with an FCC order, the Commission issued an order adopting a relief plan consisting of a concentrated overlay along the Interstate-35 corridor. This overlay will encompass mostly Austin, Georgetown and San Marcos. Although the overlay is tentatively scheduled for August 4, 2001, the Commission's order requires Commission Staff to evaluate the impact of number pooling and report to the Commission by June 1, 2000, for the express purpose of determining whether the overlay needs to actually be implemented in August 2001 or whether it can be further delayed. As discussed below, the impacts of number pooling have been extremely positive, and the life of the 512 area code has been extended significantly.
- **682 and 817:** As of December 1999, the Commission approved an overlay for the 817 area code, which covers the Fort Worth area. Beginning on October 7, 2000 cities such as Arlington, Euless, Fort Worth, and Glendale were required to use ten-digit dialing for local calls. The new area code, 682, overlays the entire geographical area covered by the 817 area code.
- 903: Although 903 has not been declared in jeopardy, it is projected to exhaust sometime in the fourth quarter of 2002. Consequently, the Commission and the industry have begun exploring options for this farnortheast Texas area code.
- 210, 915: These area codes in San Antonio and West Texas are both codes that the Commission is beginning to monitor closely as they approach their projected exhaust dates.

In addition to specific customer education for each change in area codes, the Commission maintains an area code website that tracks activity statewide. The website also includes a listing of NXXs (also known as prefixes) by city.

N11 CODES

Another development in the world of numbering has been the increased use of FCC administered N11 codes. The federal government recognizes only 211, 311, 511,

and 711 as nationally assigned NXXs. However, other codes have traditional uses, as shown below.

N11 CODE	DESCRIPTION
211	Community Information and Referral Services (US)
311	Non-Emergency Police and Other Governmental Services (US)
411	Local Directory Assistance
511	Traffic and Transportation Information (US); Reserved (Canada)
611	Repair Service
711	Telecommunications Relay Service (TRS)
811	Telephone Companies' Business Offices
911	Emergency

The FCC does not direct state commissions to administer the N11 codes. Further, there really are no concrete industry guidelines for the assignment of N1 codes; interested parties generally just contact the North American Numbering Plan Administrator (NANPA). However, because the codes affect locally run services, they are important to the citizens of Texas. Examples of local areas utilizing available codes are the recent actions of Dallas and Austin to begin using the 311 code for city-administered maintenance, repair, and other non-emergency services.

Recognizing the importance of N11 codes, on October 20, 2000, the Texas Commission proposed to amend its P.U.C. SUBST. R. §26.127, relating to *Abbreviated Dialing Codes*, to designate the 211 code for community services information and 511 for traffic and transportation information. The 211 dialing code was requested by the Texas Health and Human Services Commission to implement the establishment of a statewide clearinghouse number for community services and will provide free information and referrals to community resources. Assignment of 211 for this purpose is expected to alleviate some of the congestion on the 911 network and to aid the state network of health and human services in coordination. The FCC assigned 211 for community information and referral services on July 21, 2000, at which time it also assigned 511 for traffic and transportation information. ¹¹⁵

The Commission has encouraged the utilization of the 711 code for Telecommunications Relay Service ahead of the federal implementation mandated date of October 2001. As of October 2000, the 711 code was available in most parts of Texas that were not served by SWBT, which will deploy the code by the end of February 2001. Formal proceedings by the Commission were not necessary because it negotiated with the Texas Telephone Association to take the initiative to start 711 throughout the state without any substantive rule forcing action. The Commission will contract out an outreach project to educate companies and agencies providing PBX systems that need to be modified and to work with payphone service companies and wireless providers that have not complied by the time SWBT deployment is completed.

¹¹⁵ Third Report and Order and Order on Reconsideration (FCC 00-256/FCC 00-257) (Order). The Texas Commission will hold a public hearing to discuss the implications of these new dialing codes at the Commission on January 9, 2001.

APPENDIX F: LIST OF ILECS

The ILECs listed below provide local service to Texas customers. They are arranged according to their most recently available annual revenues. The number of access lines shown provides an approximation of their number of customers.

The dollar figure in the Capitalization column indicates the value of debt and equity of the parent company in its most recent financial statement, which in most cases was year-end 1998 or year-end 1999. 116

Table 30 – List of ILECs

-	_	Access	Net Plant	
Company	Revenues	Lines	in Service	Capitalization
Southwestern Bell Telephone Co.	\$5,079,511,443	10,236,332	\$6,496,934,712	\$9,198,836,125
GTE Southwest, Inc.	\$980,008,987	2,514,573	\$1,624,058,351	\$2,165,900,000
Central Telephone Co. of Texas	\$96,484,266	227,387	\$166,511,082	\$192,556,201
United Telephone Co. of Texas	\$78,916,012	163,151	\$144,023,526	\$193,031,633
Lufkin-Conroe Tel. Exchange	\$71,093,614	113,276	\$99,568,803	\$106,653,910
Sugar Land Telephone Company	\$40,420,339	76,769	\$57,428,905	\$90,115,545
Guadalupe Valley Tel. Coop.	\$21,872,553	34,971	\$39,422,787	\$102,987,609
Fort Bend Telephone Company	\$20,575,392	40,688	\$38,223,975	\$59,783,359
Century Tel. of San Marcos, Inc.	\$19,577,593	31,926	\$25,810,866	\$85,580,114
Eastex Telephone Cooperative	\$16,287,490	30,476	\$42,672,265	\$97,093,597
Kerrville Telephone Co., Inc.	\$13,707,960	24,659	\$29,254,044	\$40,797,580
Texas ALLTEL	\$13,009,134	30,235	\$32,345,855	\$45,323,548
Valley Telephone Co-op, Inc.	\$8,384,626	6,232	\$25,283,590	\$77,886,375
Hill Country Telephone Co-op	\$7,828,484	15,104	\$16,426,501	\$34,753,396
Etex Telephone Cooperative, Inc.	\$6,669,268	14,749	\$12,066,840	\$34,542,253
Big Bend Telephone Co. of Texas	\$6,592,454	5,398	\$25,734,805	\$47,383,287
Peoples Telephone Co-op, Inc.	\$6,350,346	12,374	\$15,683,357	\$28,721,876
Central Texas Telephone Co-op	\$5,568,572	7,618	\$26,964,326	\$75,378,587
Century Tel. of Lake Dallas, Inc.	\$5,542,819	11,516	\$10,135,917	\$18,558,725
Brazoria Telephone Company	\$5,203,736	6,524	\$14,602,604	\$32,890,474
Livingston Telephone Company	\$4,195,975	6,990	\$4,078,293	\$12,786,115
Colorado Valley Telephone Coop.	\$3,977,949	6,587	\$14,883,963	\$32,527,147

¹¹⁶ The Commission's Financial Review Division made a determination which subsidiary of a company was the parent based on financial statements and experience in the industry. Staff did not contact or ask the firm directly for this information, so the Commission does not claim that the identification of the parent companies is exact. Nor did staff make an attempt to determine the market capitalization of the publicly traded companies in this survey. Thus, the figures presented in this analysis should be considered illustrative rather than definitive.

ALL ILEUS	\$6,577,877,525	13,/0/,028	\$9,098,651,710	Φ10,040,084,478
TOTALS ALL ILECs	\$6 577 977 575	13,707,628	¢0 000 651 710	\$13,343,684,478
TOTAL C				
Border to Border Communications	\$277,480	83	\$998,983	\$1,945,953
Southwest Arkansas Tel. Co-op.	\$291,023	547	\$555,352	\$22,083,995
North Texas Telephone Company	\$444,268	821	\$837,084	\$1,822,901
Blossom Telephone Company	\$664,813	1,421	\$1,007,000	\$1,853,278
Cumby Telephone Co-op, Inc.	\$746,900	888	\$994,352	\$7,029,402
Tatum Telephone Exchange	\$841,484	1,098	\$1,632,706	\$4,865,994
Cameron Telephone Company	\$841,577	1,261	\$1,850,340	\$31,166,060
La Ward Telephone Exchange	\$964,875	1,197	\$2,309,353	\$6,283,906
Dell Telephone Cooperative, Inc.	\$966,400	713	\$6,900,967	\$28,780,276
Lake Livingston Telephone Co.	\$984,276	1,169	\$1,656,098	\$3,140,606
Electra Telephone Company	\$1,082,853	1,973	\$2,870,023	\$4,463,229
Community Telephone Co., Inc.	\$1,213,433	1,862	\$2,339,221	\$13,860,278
XIT Rural Telephone Cooperative	\$1,301,439	1,337	\$5,345,458	\$12,499,795
Brazos Telephone Co-op, Inc.	\$1,308,047	1,260	\$1,583,810	\$10,640,994
Wes-Tex Telephone Co-op, Inc.	\$1,342,962	3,381	\$2,143,802	*
Lipan Telephone Company	\$1,383,311	1,375	\$1,217,254	\$4,431,805
Santa Rosa Telephone Co-op	\$1,449,705	2,375	\$2,146,599	\$17,682,533
Coleman County Telephone Coop.	\$1,454,484	2,234	\$8,079,541	\$15,942,305
Riviera Telephone Company, Inc.	\$1,613,231	1,249	\$1,921,188	\$5,475,255
Industry Telephone Company	\$1,619,059	2,189	\$3,415,283	\$10,165,848
Five Area Telephone Cooperative	\$1,636,036	1,489	\$2,688,978	\$12,664,974
Mid-Plains Rural Tel. Co-op.	\$1,797,570	3,302	\$3,902,947	\$14,251,291
Ganado Telephone Company, Inc.	\$1,902,766	3,031	\$8,091,324	\$22,868,140
West Texas Rural Tel. Co-op	\$1,974,938	2,053	\$2,974,169	\$13,899,695
Century Tel. of Port Aransas, Inc.	\$2,303,320	4,702	\$2,667,810	\$7,537,027
Brazos Telecommunications, Inc.	\$2,563,526	4,325	\$3,134,549	\$17,030,716
ALENCO	\$2,741,087	3,333 1,746	\$6,823,043	\$17,050,716
Comanche County Tel. Company	\$2,741,087	5,535	\$2,782,007	\$9,350,823
West Plains Telecomm., Inc.	\$3,120,854	5,863	\$2,908,492	\$12,660,255
South Plains Telephone Co-op	\$3,373,380	5,286	\$4,799,476	\$18,532,762
Muenster Tel. Corp. of Texas	\$3,375,380	3,830	\$6,275,401	\$14,535,065
Southwest Texas Tel. Company E.N.M.R. Telephone Cooperative	\$3,537,118 \$3,441,276	3,958 885	\$7,309,853 \$9,302,624	\$25,107,551 \$101,466,708
Taylor Telephone Co-op, Inc.	\$3,555,123	7,187		\$30,949,500
			\$9,757,521	
Cap Rock Telephone Co-op, Inc.	\$3,835,959	3,878 4,590	\$6,624,160	\$20,785,911
Poka-Lambro Rural Tel. Co-op.	\$3,907,811	3,878	\$6,689,575	\$32,246,319

ALL ILECs	\$6,577,877,525	13,707,628	\$9,098,651,710	\$13,343,684,478
Cooperatives	\$109,095,087	\$169,516	\$267,892,960	\$709,634,273
Investor-Owned Utilities	\$6,468,782,438	\$13,538,112	\$8,830,758,750	(Private)
				\$377,340,356
				(Public)

\$11,997,438,918

Source: PUC 1999 Earnings Monitoring Reports. 117

¹¹⁷ Some of the companies listed above are owned by a common parent company. Notes on company relationships:

Lufkin-Conroe Telephone Exchange, Inc., an ILEC that elected regulation pursuant to PURA, Chapter 59 on 8/18/97, was purchased by Texas Utilities (TU) in November 1997. In May 1999, TU

changed its name to TXU Communications Telephone Company (TXU). On 5/12/2000, TXU and Fort Bend Telephone Company merged. The merged companies, TXU and Fort Bend Telephone Company, are owned by TXU Corporation (50%) and a group of private investors (50%).

GTE Southwest, Inc. and Contel of Texas, Inc., two sister ILECs that elected regulation pursuant to PURA, Chapter 58 on 9/20/95, merged with Bell Atlantic this year to form a new company, Verizon. On September 1, 2000, Verizon sold approximately 200 Texas telephone exchanges to a newly-formed company, Valor, Inc. Valor elected to be regulated pursuant to PURA, Chapter 59, but agreed to honor the Chapter 58 commitments made by GTE and Contel pursuant to PURA, Chapter 58.

Alltel Corporation owns two ILECs in Texas, including Alltel Texas, Inc. and Sugar Land Telephone Company, an ILEC that elected to be regulated pursuant to PURA, Chapter 59, on 10/20/95.

Sprint Corporation owns two ILECs in Texas formerly known as Central Telephone Company of Texas, Inc. (Centel) and United Telephone Company of Texas, Inc. The Sprint companies elected to be regulated pursuant to PURA, Chapter 59 in 1997.

APPENDIX G: LIST OF CLECS

Below is a list of entities that have been awarded a COA or an SPCOA certificate as of December 31, 2000. Certificate approval indicates only that the company has Commission permission to provide telecommunications services (*i.e.*, some may not yet be offering services and some may no longer be in business). Because the telecommunications market is increasingly dynamic, this appendix reflects only a static view of potential competitors. The Commission web site periodically posts an updated version of this list at http://www.puc.state.tx.us.

How to use this list:

Companies named include those that were recently certified. Since the data period of the request concerned only the calendar years 1998 and 1999, many of these companies did not provide information because they were either not yet certified or were not yet in operation. Companies are alphabetized by most recent names, with previous or secondary names listed afterward.

Information listed in the "Filed Data Request" column indicates the following:

- Y: Yes, the company responded to the report request for this report
- N: Certificate is in force, but the company did not reply to the data request
- New: Company was certificated in 2000 and therefore is too new to have replied to the data set

Information listed in the "ICA" column indicates the following:

- Y: Yes, the company has an approved interconnection agreement
- N: No, the company does not have an interconnection agreement

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Utility Name	Type of Certification	Date Issued	Replied to Data Request	ICA
@link Networks, Inc., d/b/a Dakota Services Limited	SPCOA	01/13/1999	Y	Y
1-800-4-A-PHONE, d/b/a AccuTel of Texas, Inc.	SPCOA	02/06/1997	Y	Y
1-800-RECONEX, Inc., d/b/a Sterling International Funding, Inc.	SPCOA	10/14/1996	N	Y
1 stel, Inc.	SPCOA	09/09/1999	N	Y
2-Infinity.com, Inc., d/b/a Phone City, Afaneh, Inc.	SPCOA	01/13/1999	N	у
2nd Century Communications, Inc.	SPCOA	08/05/1999	Y	Y
A-CBT System, Inc., d/b/a Budget Communications	SPCOA	09/23/1999	N	Y

Utility Name	Type of Certification	Date Issued	Replied to Data Request	ICA
Access 21 Corporation, d/b/a New Edge Networks	SPCOA	09/23/1999	Y	Y
Actel Integrated Communications, Inc.	SPCOA	09/09/1999	Y	Y
Action Telcom Company	SPCOA	12/22/1995	N	N
Adelphia Business Solutions of Texas, L.P.,	SPCOA	12/14/1998	Y	Y
d/b/a Hyperion Communications of Texas, L.P.				
Advanced Communicating Techniques, d/b/a Tipton Construction Company of Texas, Inc.	SPCOA	06/27/1997	Y	Y
Advanced TelCom Group, Inc., d/b/a Shared Communications Service, Inc.	SPCOA	06/03/1999	Y	N
Affinity Network, Inc.	SPCOA	08/05/1999	N	Y
Allegiance Telecom of Texas, Inc., d/b/a Allegiance Finance Company, Inc.	SPCOA	05/20/1999	Y	Y
Alliance Network, Inc.	SPCOA	08/26/1999	N	Y
ALLTEL Communications, Inc., d/b/a Sugar Land Telephone Company	COA	05/20/1999	Y	Y
Alternative Telephone Connections, Inc.	SPCOA	04/21/1998	Y	Y
AMA Telecom, Inc.	SPCOA	04/27/2000	New	Y
Amarillo Cell Telco	SPCOA	08/07/1996	N	Y
American Lightwave	SPCOA	07/18/2000	New	Y
American Metrocomm/Texas, Inc.	SPCOA	10/22/1997	N	Y
American PhoneCom, Inc., d/b/a North American Telco, Inc.	SPCOA	10/14/1998	N	Y
Americas Conex, L.L.C.	SPCOA	10/28/1996	N	N
America's Tele-Network Corp.	SPCOA	04/24/1996	N	N
Americas, Inc.	SPCOA	11/18/1999	N	N
Ameritech Communications International, Inc.	SPCOA	03/26/1997	N	Y Y
Annox, Inc. ARC Texas, Inc., d/b/a Allied Riser of Texas, Inc.	SPCOA SPCOA	05/31/2000 04/16/1999	New Y	Y
Arrival Communications, Inc.	SPCOA	03/01/2000	New	Y
AT&T Communications of Texas, L.P., d/b/a AT&T Communications of the Southwest, Inc.	COA	04/24/1996	Y	Y
ATS, d/b/a ATS Telecommunications Systems, Inc., NHS Communications Group, Inc., NHS Network Services	SPCOA	05/21/1997	Y	Y
AustiCo Telecommunications, Inc., d/b/a Masters Financial Services	SPCOA	01/15/1998	N	Y
Austin Bestline Company	SPCOA	07/10/1996	Y	Y
Austin Teleco USA, Inc., d/b/a Telco USA, Inc.	SPCOA	03/26/1997	N	Y
aXessa, d/b/a Columbia Telecommunications, Inc.	SPCOA	07/15/1999	N	N
Backbone Communications, Inc.	SPCOA	03/23/2000	Y	N
Basicphone, Inc.	SPCOA	08/06/1997	Y	Y
BellSouth BSE, Inc.	SPCOA	05/06/1998	N	Y
beMANY!, d/b/a eVulkan, Inc., be MA	SPCOA	09/26/2000	New	N
Birch Telecom of Texas Ltd., L.L.P.	SPCOA	12/15/1998	Y	Y
BlueStar Networks, Inc.	SPCOA	08/26/1999	Y	Y
Brazos Global Communications	SPCOA	06/20/2000	New	N
BroadBand Office Communications, Inc.	SPCOA	01/13/2000	New	Y
BroadStream Corporation, d/b/a CommcoTec Corporation	SPCOA	07/15/1999	Y	Y
Broadview Networks, Inc.	SPCOA	05/09/2000	New	N
Broadwing Local Services, Inc.	SPCOA	09/13/2000	New	N
Business Telecom, Inc., d/b/a BTI Buy-Tel Communications, Inc.	SPCOA	06/27/1997	Y	Y
C2C Fiber, Inc.	SPCOA SPCOA	02/05/1998 08/12/1998	Y N	Y
C3 Communications, Inc.	SPCOA	05/20/1999	N N	Y
Cable & Wireless, Inc.	SPCOA	01/25/1996	N N	N
Cable Plus Company, L.P.	SPCOA	02/25/1998	N N	Y
Call For Less Long Distance, Inc.	SPCOA	11/14/1996	N	Y
Callnet Communications, Inc.	SPCOA	03/01/2000	New	Y
Capital 4 Outsourcing, Inc.	SPCOA	01/13/2000	New	N

Utility Name	Type of Certification	Date Issued	Replied to Data Request	ICA
Capital Telecommunications, Inc.	SPCOA	04/24/1996	N	Y
CapRock Telecommunications Corp., d/b/a CapRock Communications, IWL Communications, Inc. IWL Connect, IWL Holding Corporation	SPCOA	02/08/1999	Y	Y
Carrera Communications, L.P., d/b/a InfoCom Services, Inc.	SPCOA	11/20/1998	Y	Y
Cbeyond Communications of Texas, L.P.	SPCOA	08/22/2000	New	Y
Cellufone of Texas, Inc.	SPCOA	04/21/1998	N	Y
Central Texas Communications, Inc.	SPCOA	04/30/1999	Y	Y
Choctaw Communications, L.L.C., d/b/a Smoke Signals Communications	SPCOA	10/14/1996	Y	Y
CI Squared, Inc.	SPCOA	11/18/1999	N	N
Ciera Network Systems, Inc.	SPCOA	05/31/2000	New	Y
ClearSource, Inc., d/b/a Home Data, Inc.	SPCOA	10/22/1998	Y	Y
ClearWorks.net, Inc., d/b/a ClearWorks Technologies, Inc.	SPCOA	08/26/1999	Y	Y
CNG Communications, Inc.	SPCOA	09/23/1999	N	N
CO Space Services Texas, L.P.	SPCOA	03/23/2000	New	Y
Comm South Companies, Inc., d/b/a Texas Comm South, Inc.	SPCOA	01/25/1996	N	Y
CommServ, d/b/a Scholl Interest, Inc.	SPCOA	09/23/1999	Y	Y
Communications Pearl, LLC	SPCOA	07/22/1998	N	Y
Compass Telecommunications, Inc. Computer Business Sciences, Inc.	SPCOA	09/13/2000	New	Y
ComTel Services, d/b/a Ruth Riza, ComTel Services, Excalibur Telephone, Inc.,	SPCOA SPCOA	06/17/1999 04/14/1997	N N	Y
Concert Communications Sales, LLC	COA	12/01/1999	N	N
Connect!, d/b/a CCCTX, Inc. Connect!, Connect Communications Corporation, Connect Holdings Corporation	SPCOA	05/20/1999	Y	Y
ConnectSouth, d/b/a iConnect Corp.	SPCOA	01/13/2000	Y	Y
Convergent Communications Services, Inc.	SPCOA	12/01/1999	Y	N
CoreComm, d/b/a USN Southwest, Inc., USN Communications Southwest, Inc. CoreComm Texas, Inc.	SPCOA	05/09/1996	N	Y
CoServ Broadband Services, d/b/a Telephone Plus, MultiTechnology Services, Inc. MultiTechnology Service, L.P.	SPCOA	02/25/1998	Y	Y
CoServ, L.L.C.	SPCOA	07/08/1998	Y	Y
CoServe, LLC	COA	09/10/1997	Y	Y
Covad Communications Company	SPCOA	08/12/1998	Y	Y
CS Wireless Systems, Inc., d/b/a The Beam	SPCOA	11/20/1997	N	Y
CTJ Investments, Inc., d/b/a Texas Cellular Communications	SPCOA	06/27/1997	N	Y
Cumby Telephone Cooperative, Inc.	COA	06/11/1998	Y	Y
Cypress Telecommunications Corporation Data Delivery Network, d/b/a Digital Broadcast Network Corporation	SPCOA SPCOA	09/23/1998 09/09/1998	N N	Y N
Data Recall, L.L.C.	SPCOA	11/19/1998	N	N
DATACOM	SPCOA	01/13/2000	New	N
Deloach's Home Entertainment Centers Inc., d/b/a Rent City	SPCOA	04/21/1998	N	Y
Delta Phones, Inc.	SPCOA	03/01/2000	New	Y
Dial Nationwide, Inc.	SPCOA	01/13/2000	New	N
Dial Tone USA, Inc., d/b/a Dial Tone USA, Dial Services of Texas	SPCOA	06/27/1997	N	Y
Dialtone Depot, Inc.	SPCOA	05/31/2000	New	Y
Diamond Communications International, Inc.	SPCOA	08/06/1997	N	Y
Diamond Telco-Your Home Telephone Store, d/b/a Diamond Cellular, Inc.	SPCOA	04/23/1997	Y	Y
Diamondback International, Inc.	SPCOA	08/14/2000	New	N
Digital Network Services, Inc.	SPCOA	07/22/1998	N	N
Digital Services Corporation	SPCOA	03/26/1997	N	N
Digital Teleport, Inc.	SPCOA	11/19/1998	N	Y
Direct Communications, Inc., d/b/a Online Communications	SPCOA	06/04/1997	Y	N

DMJ Communications, Inc.	Y Y Y Y Y N N N Y N N N N N N N N N N N
DMJ Communications, Inc.	Y Y Y Y N N N Y N N N N N N N N N N N N
DPI-Teleconnect, L.L.C.	Y Y Y N N Y N N N N N N N N N N N N N N
DSLnet Communications, LLC	Y N N Y N N Y N N N N N N N N N N N N N
DVC Telecom, d/b/a D.V.C. Enterprises, Inc.	Y N N Y N N N N N N N N N N N N N N N N
Dynamic Cable Construction Company, Inc.	N N Y N N Y N
Dynamic Telcom Engineering I, LLC	N Y N N Y N
Espire d/b/a ACSI Local Switched Services, Inc. Espire Communications, Inc	Y N N Y N N
Espire Communications, Inc Eagle Communications Group, Inc. Eagle Communications Group, Inc. Eagle Communications, Inc. Espect Communications, Inc. Espect Communications Corp. (Western CLEC Corp.) Espect Communications Corp. (Western CLEC Corp.) Eclipse Communications Corp. (Western CLEC Corp.) Elage Connections, Inc. Elage Connections, Inc	N N Y N
Eagle Communications, d/b/a Eagle Communications, Inc. Easy Cellular, Inc. Easy Cellular, Inc. Eclipse Communications Corp. (Western CLEC Corp.) Eclipse Connections, Inc. Elpaso Global Networks Company, d/b/a El Paso Energy Communications Company eLEC Communications d/b/a Essex Communications, Inc. Electric Lightwave, Inc. Enron Broadband Services, Inc. ePhone Co. Ernest Communications, Inc. ET Telephone, Inc. ET Telephone, Inc. ET Telephone Company, Inc., d/b/a Kingsgate Telephone d/b/a Summerwood EverConnect, Inc., d/b/a One Source Telecommunications, Inc. ESPCOA EVERCA EVE	N Y N N
Easy Cellular, Inc.	Y N N
Eclipse Communications Corp. (Western CLEC Corp.) SPCOA 04/01/1998 Y Edge Connections, Inc. SPCOA 08/18/2000 New El Paso Global Networks Company, d/b/a El Paso Energy Communications Company eLEC Communications d/b/a Essex Communications, Inc. SPCOA 11/09/2000 New Electric Lightwave, Inc. SPCOA 09/09/1999 N Enron Broadband Services, Inc. SPCOA 08/14/2000 New ePhone Co. SPCOA 10/06/1999 N Ernest Communications, Inc. SPCOA 10/06/1999 N Ernest Communications, Inc. SPCOA 10/13/2000 New ET Telephone, Inc. SPCOA 01/27/2000 New ET Telephone Company, Inc., d/b/a Kingsgate Telephone d/b/a Summerwood SPCOA 09/13/2000 New ETS Telecommunications, Inc. SPCOA 06/11/1998 N Exect Telecommunications, Inc. SPCOA 06/11/1998 N Exect Telecommunications, Inc. SPCOA 02/08/1999 N Exect Telecommunications, Inc. SPCOA 07/25/2000 New EXP Communications, Inc. SPCOA 07/25/2000 New Exp Communications, Inc. SPCOA 02/08/1999 N EXP Communications SPCOA 02/08/1999 N EXP Communications SPCOA 09/23/1996 N EXP Communications SPCOA 06/27/1997 N Existence SPCOA 06/27/1997 N Existence SPCOA 02/08/09/09/09/09/09/09/09/09/09/09/09/09/09/	N N
Edge Connections, Inc.	N
El Paso Global Networks Company, d/b/a El Paso Energy Communications Company eLEC Communications d/b/a Essex Communications, Inc. Electric Lightwave, Inc. Enron Broadband Services, Inc. ePhone Co. Ermest Communications, Inc. Ermest Communications, Inc. Ermest Communications, Inc. ET Telephone, Inc. ET Telephone Company, Inc., d/b/a Kingsgate Telephone d/b/a Summerwood EverConnect, Inc., d/b/a One Source Telecommunications, Inc. Expect Telecommunication	
d/b/a El Paso Energy Communications Company eLEC Communications d/b/a Essex Communications, Inc. Electric Lightwave, Inc. Electric Lightwave, Inc. Enron Broadband Services, Inc. EPCOA EPhone Co. Enset Communications, Inc. EPCOA ESPCOA EPCOA EPC	N
eLEC Communications d/b/a Essex Communications, Inc. SPCOA 11/09/2000 New Electric Lightwave, Inc. SPCOA 09/09/1999 N Enron Broadband Services, Inc. SPCOA 08/14/2000 New ePhone Co. SPCOA 10/06/1999 N Ernest Communications, Inc. SPCOA 10/8/1998 & 5-20- y Y essential.com, inc. SPCOA 01/27/2000 New ET Telephone, Inc. SPCOA 01/13/2000 New ETEX Telecom SPCOA 09/13/2000 New ETS Telephone Company, Inc., d/b/a Kingsgate Telephone d/b/a Summerwood COA 12/08/1995 N EverConnect, Inc., d/b/a One Source Telecommunications, Inc. SPCOA 06/11/1998 N Excel Telecommunications, Inc. SPCOA 02/08/1999 N EXP Communications, Inc. SPCOA 07/25/2000 New Express TeleCommunications SPCOA 02/08/1999 N E-Z Fon Services, Inc., d/b/a Faithnet Telecommunications, Inc. SPCOA 09/23/1996 N E-Z Talk Telecommunications Internationa	
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Ernest Communications, Inc. SPCOA 10/8/1998 & 5-20- Y 99 essential.com, inc. SPCOA 01/27/2000 New ET Telephone, Inc. SPCOA 01/13/2000 New ETEX Telecom SPCOA 09/13/2000 New ETS Telephone Company, Inc., d/b/a Kingsgate Telephone d/b/a Summerwood EverConnect, Inc., d/b/a One Source Telecommunications, Inc. SPCOA 06/11/1998 N Excel Telecommunications, Inc. SPCOA 02/08/1999 N EXP Communications, Inc. SPCOA 07/25/2000 New Express TeleCommunications SPCOA 02/08/1999 N EZ Ton Services, Inc., d/b/a Faithnet Telecommunications, Inc. SPCOA 09/23/1996 N EZ Talk Telecommunications International, Ltd. SPCOA 06/27/1997 N FairPoint Communications Solutions Corp., d/b/a FairPoint Communications Corp.	N
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essential.com, inc. ET Telephone, Inc. ETEX Telecom ETEX Telecom ETEX Telephone Company, Inc., d/b/a Kingsgate Telephone d/b/a Summerwood EverConnect, Inc., d/b/a One Source Telecommunications, Inc. Excel Telecommunications, Inc. EXPCOA	Y
ET Telephone, Inc. ETEX Telecom SPCOA Oy/13/2000 New ETEX Telephone Company, Inc., d/b/a Kingsgate Telephone d/b/a Summerwood EverConnect, Inc., d/b/a One Source Telecommunications, Inc. Excel Telecommunications, Inc. SPCOA Official Telecommunications, Inc. SPCOA Official Telecommunications EXPCOA Oy/25/2000 New EXPCOA Oy/25/2000 New EXPCOA EXPCOA Oy/25/2000 New EXPCOA Oy/25/2000 New EXPCOA Oy/25/2000 New EXPCOA Oy/23/1999 N EZ Talk Telecommunications, d/b/a EZ Talk, L.L.C. SPCOA Oy/23/1996 N Facilities Communications International, Ltd. SPCOA Oy/23/1997 N FairPoint Communications Solutions Corp., d/b/a FairPoint Communications Corp.	Y
ETS Telephone Company, Inc., d/b/a Kingsgate Telephone d/b/a Summerwood EverConnect, Inc., d/b/a One Source Telecommunications, Inc. Excel Telecommunications, Inc. EXPCOA	Y
ETS Telephone Company, Inc., d/b/a Kingsgate Telephone d/b/a Summerwood EverConnect, Inc., d/b/a One Source Telecommunications, Inc. Excel Telecommunications, Inc. EXPCOA	N
EverConnect, Inc., d/b/a One Source Telecommunications, Inc. Excel Telecommunications, Inc. EXPCOA	Y
EXP Communications, Inc. Express TeleCommunications E-Z Fon Services, Inc., d/b/a Faithnet Telecommunications, Inc. EZ Talk Telecommunications, d/b/a EZ Talk, L.L.C. Facilities Communications International, Ltd. FairPoint Communications Solutions Corp., d/b/a FairPoint Communications Corp.	Y
Express TeleCommunications E-Z Fon Services, Inc., d/b/a Faithnet Telecommunications, Inc. EZ Talk Telecommunications, d/b/a EZ Talk, L.L.C. SPCOA 11/20/1997 N EZ Talk Telecommunications, d/b/a EZ Talk, L.L.C. SPCOA 09/23/1996 N Facilities Communications International, Ltd. SPCOA 06/27/1997 N FairPoint Communications Solutions Corp., d/b/a FairPoint Communications Corp.	Y
E-Z Fon Services, Inc., d/b/a Faithnet Telecommunications, Inc. EZ Talk Telecommunications, d/b/a EZ Talk, L.L.C. SPCOA 11/20/1997 N EZ Talk Telecommunications, d/b/a EZ Talk, L.L.C. SPCOA 09/23/1996 N Facilities Communications International, Ltd. SPCOA 06/27/1997 N FairPoint Communications Solutions Corp., d/b/a FairPoint Communications Corp.	N
EZ Talk Telecommunications, d/b/a EZ Talk, L.L.C. SPCOA 09/23/1996 N Facilities Communications International, Ltd. SPCOA 06/27/1997 N FairPoint Communications Solutions Corp., d/b/a FairPoint Communications Corp.	Y
Facilities Communications International, Ltd. SPCOA 06/27/1997 N FairPoint Communications Solutions Corp., d/b/a FairPoint Communications Corp.	Y
FairPoint Communications Solutions Corp., SPCOA 02/10/2000 New d/b/a FairPoint Communications Corp.	Y
d/b/a FairPoint Communications Corp.	Y
	Y
FamilyTel of Texas, LLC SPCOA 08/28/2000 New	Y
	Y
	N
First Telecommunications Network SPCOA 05/06/1997 N	Y
	N
	Y
	N
	Y
	Y
	Y
Frontier Telemanagement, Inc. (Global Crossing Telemanagement, SPCOA 12/12/1997 Y	Y
Inc.) Future Communications SPCOA 04/01/1998 N	N
	Y
	Y
	N
	N
Go-Comm, Inc., d/b/a Go-Tel, Inc. SPCOA 11/05/1997 N	_
	V
Grande Communications, d/b/a Grande Communications, Inc. SPCOA 03/23/2000 Y	y Y

Utility Name	Type of Certification	Date Issued	Replied to Data Request	ICA
Grande Communications Networks, Inc.				
Grande River Communications, Inc.	SPCOA	11/18/1999	N	Y
Great West Services, Ltd.	SPCOA	12/18/1997	N	Y
Griffin Communication & Security Systems, Inc.	SPCOA	04/02/1997	N	N
GST Texas Lightwave, Inc. (GST Telecom of Texas)	SPCOA	08/07/1996	Y	Y
GTC Telecom	SPCOA	08/25/2000	New	N
G-TEL Enterprises, Inc.	SPCOA	01/13/2000	New	N
GTS	SPCOA	10/21/1999	N	N
Guadalupe Valley Communications Systems, L.P., d/b/a Guadalupe Valley Communications Systems, Inc.	SPCOA	01/13/1999	Y	N
Hamilton Telecommunications, d/b/a Hamilton Telephone Company	SPCOA	03/01/2000	New	N
HBC TexasTel, Inc.	SPCOA	06/14/2000	New	Y
Heritage Technologies, Ltd.	COA	12/19/2000	New	N
Hinotel	SPCOA	05/18/2000	New	Y
HJN Telecom, Inc.	SPCOA	11/18/1999	N	Y
Hollywood Communications, Ltd.	SPCOA	05/06/1997	N	Y
Hotelecom Communications Corporation	SPCOA	05/21/1997	N	N
ICG ChoiceCom, L.P., d/b/a CSW/ICG ChoiceCom, L.P., ICG Telecom Group, Inc.	SPCOA	05/21/1997	Y	Y
ILD, d/b/a Intellicell Operator Services, Inc.	SPCOA	03/26/1999	N	N
In Touch Communications	SPCOA	04/27/2000	New	Y
InfoHighway, d/b/a A.R.C. Networks, Inc., InfoHighway Communications Corporation, Info-Highway International, Inc. GTCR Fund VII, L.P., & GTCR Co-Invest, L.P.	SPCOA	10/21/1999	N	Y
Infolink Communications, Ltd.	SPCOA	09/10/1997	N	N
INLEC Communications TX, LLC	SPCOA	11/27/2000	New	N
Integral Telecommunication Networks, L.L.C.	SPCOA	11/19/1998	N	N
Intellistar Communications, Inc., d/b/a Intellistar Communications	SPCOA	06/04/1997	N	N
Intermedia Communications, Inc.	SPCOA	03/05/1997	Y	Y
International Exchange Communications, Inc. d/b/a Pacific Gateway Exchange, Inc. & IE Com.	SPCOA	08/26/1998	N	N
International Talk.Com, Inc.	SPCOA	01/13/2000	New	N
International Telcom, Ltd.	SPCOA	11/27/2000	New	N
Inter-Tel NetSolutions, Inc.	SPCOA	12/02/1996	N	N
Intetech, L.C.	SPCOA	05/06/1998	N	N
IntraLine	SPCOA	11/04/1999	Y	Y
Ionex Communications South, Inc. d/b/a Valu-Line of Longview, Inc.	SPCOA	12/21/1995	Y	Y
IP Communications Corp.	SPCOA	04/09/1999	Y	Y
IQC, LLC	SPCOA	10/30/2000	New	N
ITC^DeltaCom, d/b/a ITC DeltaCom Communications, Inc. or ITC^DeltaCom, Inc. or Interstate FiberNet, Inc. (IFC)	SPCOA	09/24/1998	Y	Y
IVIT Communications Group, Inc.	SPCOA	08/05/1999	Y	Y
Jato Operating Corp., d/b/a Jato Communications Corp.	SPCOA	09/24/1998	N	Y
K2C TelCom, Inc., d/b/a KCC TelCom, Inc. Kerrville Communications Corporation	COA	07/10/2000	New	N
Kero Communications, Inc., d/b/a KeRo Communications	SPCOA	05/06/1997	N	N
KMC Network Services, Inc. d/b/a KMC Telecom V, Inc.	SPCOA	11/06/2000	New	Y
KMC Telecom, d/b/a KMC Telecom II, Inc.	SPCOA	8/12/1998 & 5-20- 99	N	Y
KMC Telecom, d/b/a KMC Telecom III, Inc.	SPCOA	05/20/1999	N	Y
KMC Telecom, d/b/a KMC Telecom IV, Inc.	SPCOA	05/09/2000	New	Y
KMC Telecom, d/b/a KMC Telecom, Inc.	SPCOA	8/21/1996 & 5-20- 99	Y	Y
Koyote Telephone, Inc.	SPCOA	10/21/1999	Y	Y
LayerOne, Inc.	SPCOA	12/11/2000	New	N

Utility Name	Type of Certification	Date Issued	Replied to Data Request	ICA
LCI International Telecom Corporation	SPCOA	05/18/2000	New	N
LCT Long Distance, Inc.	SPCOA	09/24/1998	N	N
LEC Unwired, LLC	SPCOA	02/19/1999	Y	Y
Level 3 Communications, L.L.C.	SPCOA	04/01/1998	Y	Y
LineDrive Communications of North Dallas, d/b/a LineDrive Communications of Addison, Addison CLEC Networks, Inc., Northern Telecom Limited, Nortel Networks	SPCOA	08/05/1999	Y	N
Local Fone Service, Inc.	SPCOA	10/14/1996	N	Y
Local Gateway Exchange, Inc.	SPCOA	08/05/1999	Y	Y
Local Telecom Service, L.L.C.	SPCOA	12/18/1997	N	Y
Local Telephone Service Company, Inc.	SPCOA	12/02/1996	N	Y
Logix Communications Corporation, d/b/a American Telco, Inc. (SPCOA No. 60004) Dobson Wireless, Inc.	SPCOA	02/25/1998	Y	Y
Lone Star Communications, d/b/a Credit Loans, Inc.	SPCOA	08/07/1996	Y	Y
Lone Star Telephone, Inc	SPCOA	10/28/1996	N	Y
Looking Glass Networks, Inc Jodi Caro - Contact Person	SPCOA	07/05/2000	New	Y
LSSi Corp., d/b/a Listing Services Solutions, Incorporated	SPCOA	10/21/1999	N	N
Madison River Communications, LLC	SPCOA	06/27/2000	New	Y
Matrix Telecom, Inc.	SPCOA	06/04/1997	N	N
Maverix.Net, Inc.	SPCOA	04/12/2000	New	Y
Maxcess, Inc.	SPCOA	03/23/2000	New	N
Max-Tel Communications, Inc.	SPCOA	02/25/1998	N	Y
MCImetro Access Transmission Services, Inc., d/b/a MCIMetro	COA	10/01/1997	Y	Y
Media Communication Consultants, L.L.C.	SPCOA	02/19/1999	N	Y
Megsinet-CLEC, Inc.	SPCOA	01/13/1999	N	N
Metro Access Networks, Inc.	SPCOA	11/13/1996	N	Y
Metro Connection, Inc.	SPCOA	10/28/1996	N	Y
Metro-Link Telcom, Inc.	SPCOA	02/23/1996	N	Y
Metromedia Fiber Network Services, Inc., d/b/a Communication Systems Development, Inc.	SPCOA	01/14/1999	Y	Y
Metrophone, Inc.	SPCOA	06/27/1997	N	Y
MetTel, d/b/a Metropolitan Telecommunications of Texas d/b/a MetTel	SPCOA	03/01/2000	New	Y
MFS of Dallas, Inc.	SPCOA	11/21/1995	N	Y
MFS of Houston, Inc.	SPCOA	11/21/1995	N	Y
MIDCOM Communications, Inc.	SPCOA	12/19/1996	N	N
Millennium Communications	SPCOA	09/23/1999	N	N
Millennium Telcom, L.L.C.	COA	08/12/1998	Y	Y
Momentum Telecom, Inc.	SPCOA	02/25/1998	N	N
Mpower Communications Corp., d/b/a MGC Communications, Inc.	SPCOA	01/13/2000	New	Y
MSN Communications, Inc., d/b/a Telscape International, Inc.	SPCOA	05/06/1998	N	N
M-Tel Resources, Inc.	SPCOA	03/05/1997	N	Y
MVX.COM Communications, Inc.	SPCOA	11/04/1999	N	Y
MXD, d/b/a Matrix Datacom, Inc.	SPCOA	10/09/2000	New	N
Nations Bell, Inc.	SPCOA	03/06/1996	N	N
Nationwide Communication	SPCOA	10/22/1997	N	Y
Navigator Telecommunications, LLC	SPCOA	05/31/2000	New	Y
NeoPrism Networks, L.P.	SPCOA	09/21/2000	New	N
Net2000 Communications Service, Inc.	SPCOA	07/05/2000	New	Y
NET-tel Corporation	SPCOA	07/15/1999	N	Y
Network Access Solutions Corporation		07/31/2000	New	N
1	SPCOA			
Network Operator Services, Inc.	SPCOA	04/10/1996	N	Y
Network Operator Services, Inc. New Connects, Inc.			N New	Y Y
1	SPCOA	04/10/1996	1	1

Utility Name	Type of Certification	Date Issued	Replied to Data Request	ICA
Nextlink Texas, d/b/a Nextlink Texas, Inc.	SPCOA	05/06/1998	Y	Y
nii communications, Ltd., d/b/a network intelligence, inc.	SPCOA	04/09/1999	Y	Y
Nortex Telcom, L.L.C.	COA	02/25/1998	Y	Y
North Americom Corporation,	SPCOA	05/09/2000	New	N
d/b/a North American Telecommunications Corporation				
Northpoint Communications, Inc.	SPCOA	04/01/1998	Y	Y
NOS Communications, Inc.	SPCOA	04/24/1996	N	Y
NOW Communications, Inc.	SPCOA	04/21/1998	N	Y
NSPOF Communications, Inc., d/b/a GlobalNET Corporation	SPCOA	05/31/2000	New	N
Ntegrity Telecontent Services, Inc.	SPCOA	12/19/2000	New	N
NTS Communications, Inc.	SPCOA	02/08/1999	Y	Y
O1 Communications of Texas, LLC	SPCOA	01/13/2000	Y	N
Omni Prism Communications, Inc.	SPCOA	03/26/1997	N	Y
OmniCall, Inc., d/b/a OmniCall International	SPCOA	09/24/1998	N	N
Omniplex Communications Group, L.L.C., d/b/a USA Exchange, L.L.C.	SPCOA	05/07/1997	Y	Y
OnFiber Carrier Services, Inc.	SPCOA	05/31/2000	New	N
OnSite Access Local, LLC.	SPCOA	05/18/2000	New	N
Optel (Texas) Telecom, Inc.	SPCOA	09/24/1996	Y	Y
Optical Access Networks, Inc.	SPCOA	10/02/2000	New	N
ORBIT Consultants, Inc.	SPCOA	05/20/1999	N	N
Pac-West Telecomm, Inc.	SPCOA	11/18/1999	Y	N
PaeTec Communications, Inc.	SPCOA	08/05/1999	Y	N
Page-Master, Etc.	SPCOA	10/22/1997	N	N
Panhandle Telecommunications Systems, Inc.	COA	05/06/1998	N	Y
Pathnet, Inc.	SPCOA	10/21/1999	N	Y
Pathway Com-Tel, Inc., d/b/a Fiber Wave Telecom, Inc.	SPCOA	08/21/1997	Y	Y
Pathwayz Communications, Inc.	SPCOA	04/12/2000	Y	Y
Penthouse Suites, Inc.	SPCOA	12/02/1996	N	Y
People Link, d/b/a TCI Telephony Services	SPCOA	02/05/1998	N	N
Peoples Telecommunications, Inc. (PTI), d/b/a PTI	COA	10/08/1998	N	Y
Personal Touch d/b/a Cumby Cellular Communications, Inc.	SPCOA	12/18/2000	New	N
Petroleum Communications, Inc., d/b/a S&P Cellular Holding, Inc., Gulf Coast MDS Service, SeaCell Offshore Cellular Service, PetroCom, PCI, PetroCom Offshore Cellular Services & PetroCom Satellite Services	SPCOA	02/25/1998	N	N
Phone America, d/b/a Express Telecom, Inc. Paging Express, Inc.	SPCOA	04/28/1999	N	Y
Phone Call Express, d/b/a Local Phone Service, Inc.	SPCOA	10/08/1998	N	N
Phone City Communications, d/b/a The Frederick Company, Inc., d/b/a Phone City Communications	SPCOA	10/23/2000	New	N
Phone Reconnect of America, L.L.C.	SPCOA	07/15/1999	N	Y
Phone Remedies, L.L.C.	SPCOA	12/19/2000	New	Y
Phones For All, d/b/a Preferred Carrier Services, Inc.	SPCOA	09/24/1998	Y	Y
PhoneSense, d/b/a JCA, Inc. & Cooper and Associates	SPCOA	10/08/1998	Y	Y
Phonit, Inc.	SPCOA	05/21/1997	N	Y
Phonoscope, Ltd.	SPCOA	05/31/2000	New	N
Plexnet Communications Services, Inc.	SPCOA	06/04/1997	N	N
Plex-Net, Ltd.	SPCOA	03/01/2000	New	Y
Plum Creek Telephone Company, Inc.	COA	10/14/1996	N	N
PM Telecommunications, LLC	SPCOA	12/01/1999	N	N
PNG Telecommunications, Inc.	SPCOA	08/07/2000	New	N
PointeCom Inc., d/b/a Telscape International, Inc.	COA	04/12/2000	New	Y
Poka Lambro Telephone Company, Inc.	COA	11/14/1996	Y	Y
Posner Telecommunications Inc., d/b/a PageTexas	SPCOA	12/02/1996	N	Y
Premiere Network Services, Inc.	SPCOA	04/02/1997	Y	Y

Utility Name	Type of Certification	Date Issued	Replied to Data Request	ICA
Prism Operations, LLC, d/b/a Transwire Operations, LLC Prism Communication Services, Inc.	SPCOA	02/08/1999	Y	Y
Progressive Concepts, Inc.	SPCOA	03/07/1996	Y	Y
PurePacket Communications, Inc., d/b/a PurePacket Communications of the South, Inc., d/b/a PurePacket Communications, Inc.	SPCOA	07/31/2000	New	N
PWTel	SPCOA	07/20/2000	New	N
Qtel, Inc., d/b/a FXI, Inc.	SPCOA	12/19/1996	N	Y
Quality Telephone	SPCOA	07/31/2000	New	Y
Quick-Tel Communications, Inc.	SPCOA	05/06/1998	N	Y
Quintelco, Inc., d/b/a Quintel Communications, Inc.	SPCOA	12/05/1997	N	Y
Qwest Communications Corporation	SPCOA	05/31/2000	New	Y
R Tex Communications Group, Inc.	SPCOA	08/21/2000	New	N
Reach Direct, Inc.	SPCOA	01/15/1998	N	N
Real/Time Communications	SPCOA	02/25/1998	Y	N
ReFlex Communications, Inc.	SPCOA	10/09/2000	New	N
Reliant Energy Communications, Inc.	SPCOA	09/23/1999	Y	Y
Resource Innovations Group, Inc., d/b/a DFW-Direct	SPCOA	06/27/1997	N	Y
Rhythms Links, Inc., d/b/a ACI Corporation; Accelerated Connections, Inc.	SPCOA	10/08/1998	Y	Y
Rosebud Telephone, d/b/a Rosebud Cotton Company	SPCOA	03/12/1999	N	Y
Rush Communications d/b/a Nortex Utilities, Inc.	SPCOA	10/30/2000	New	N
Sage Telecom, d/b/a Sage Telecom, Inc. U.S. Telephone Holding, Inc	SPCOA	03/12/1998	Y	Y
Sager Telecom, Inc.	SPCOA	10/21/1999	N	Y
SandStream Communication and Entertainment	SPCOA	02/19/1999	N	Y
Santa Rosa Telephone Cooperative, Inc.	SPCOA	08/14/1998	Y	Y
SBC Advanced Solutions, Inc.	COA	12/01/1999	Y	Y
SCC Communications Corp.	SPCOA	01/13/2000	Y	N
ServiSense.Com, Inc.	SPCOA	08/21/2000	New	Y
Sigma Networks Telecommunications, Inc.	SPCOA	08/22/2000	New	Y
Small Town Advanced Communications, LLC	SPCOA	09/18/2000	New	N
SmartCom Telephone, L.L.C.	SPCOA	02/19/1999	N	N
Snappy Phone of Texas, Inc.	SPCOA	02/19/1999	Y	Y
SOL Communications, d/b/a STPCS Joint Ventue, LLC	COA	07/01/1999	N	Y
Source Communications LLC	SPCOA	10/21/1999	N	N
SouthNet Telecomm Services, Inc.	SPCOA	10/08/1998	N	N
Southside Communications, L.L.C.	SPCOA	06/24/1998	Y	Y
SouthWest Teleconnect, d/b/a Reitz Rentals, Inc.	SPCOA	03/26/1999	Y	y
Southwestern Bell Telephone Company	COA	08/09/1996	+	Y
Sphera Optical Networks, N.A., Inc.	SPCOA	11/13/2000	New	N
Sprint Communications Company L.P. Stargate Communications, Ltd.	COA SPCOA	10/14/1996	N N	Y
Starway Communications, Incorporated	SPCOA	09/10/1997 10/06/1999	N N	Y
State Discount Telephone, L.L.C.	SPCOA	12/05/1997	N	Y
State Pre-Pay TeleCom, Inc., d/b/a Sentinel Enterprises, Inc., d/b/a	SPCOA	07/21/2000	New	N
State Pre-Pay TeleCom, Inc.	CDCO A	07/15/1000	NT	17
State Telephone - Texas Stratos Telecom, Inc., d/b/a SOSCo's, Shell Offshore, Inc. (SOI), Shell Exploration and Production Company (SEPCO), Shell Oil	SPCOA SPCOA	07/15/1999 08/12/1998	N Y	Y
Company (SOC) & Shell Petroleum, Inc. (SPI)				
Supra Telecomm. & Information Systems, Inc.	SPCOA	05/21/1998	N	Y
Sure Connect, Inc., d/b/a Paramount Communications, Inc.	SPCOA	05/18/2000	New	N
Suretel, Inc.	SPCOA	06/11/1998	N	Y
Talk Solutions	SPCOA	09/09/1999	N	N
Talk.com Holding Corp., d/b/a Tel-Save, Inc. The Phone Company	SPCOA	06/27/1998	N	Y

Utility Name	Type of Certification	Date Issued	Replied to Data Request	ICA
Tattletel, Inc.	SPCOA	09/18/2000	New	N
Taylor Communications Group, Inc.	SPCOA	10/14/1996	Y	Y
TCG Dallas, d/b/a Teleport Communications Group, Inc.	COA	09/24/1998	Y	Y
Tech Telephone Company, Ltd.	SPCOA	10/09/1998	Y	Y
Telecom Licensing, Inc.	SPCOA	08/12/1998	N	N
TeleNetwork, Inc.	SPCOA	04/23/1997	Y	Y
Tele-One Communications, Inc.	SPCOA	08/06/1997	Y	Y
TelePacific Communications, d/b/a U.S. TelePacific Corporation, d/b/a TelePacific Communications	SPCOA	02/10/2000	New	N
Teleport Communications Houston, Inc., d/b/a Teleport Communications Group, Inc.	COA	09/24/1998	N	Y
Telera Communications, Inc.	SPCOA	12/04/2000	New	N
Telergy Network Services, Inc.	SPCOA	07/24/2000	New	N
Teligent Services, Inc., d/b/a Teligent, Inc. Microwave Services, Inc.	SPCOA	02/05/1998	Y	Y
Tel-Link, L.L.C.	SPCOA	05/11/1998	N	Y
Telseon Carrier Services, Inc.	SPCOA	09/11/2000	New	N
Telstar Telecom Company, L.L.C.	SPCOA	11/19/1998	N	N
Tel-Star Utility Corp.	SPCOA	10/06/1999	N	Y
Teltrust Communications Service, Inc.	SPCOA	09/10/1997	N	N
Tempest Communications Company, LLC	SPCOA	05/09/2000	New	Y
TenantConnect LLC	SPCOA	07/25/2000	New	N
Texas Global, Inc., d/b/a Global TeleLink Services, Inc.	SPCOA	08/22/2000	New	N
Texas Hometel, Inc.	SPCOA	11/20/1997	Y	Y
Texas In-Touch Communications, Inc.	SPCOA	01/13/2000	New	Y
Texas Networking, Inc.	SPCOA	04/01/1998	Y	Y
Texas UM, Inc.	SPCOA	05/18/2000	New	Y
The Phone Pros	SPCOA	10/21/1999	N	Y
The Telephone Reconnection	SPCOA	11/20/1997	Y	Y
Time Warner Connect	SPCOA	02/05/1997	Y	Y
Time Warner Connect - San Antonio	SPCOA	02/05/1997	N	Y
Time Warner Telecom of Texas, L.P., d/b/a Time Warner Communications of Houston, L.P., and Time Warner Telecom of Texas, L.P. (TWTC)	SPCOA	07/16/1997	Y	Y
Tin Can Communications Company, L.L.C.	SPCOA	07/17/1997	N	Y
TotalTel, Inc.	SPCOA	02/19/1999	N	N
Trans National Telecommunications, Inc.	SPCOA	07/09/1998	N	Y
TransAmerican Telephone, Inc.	SPCOA	05/06/1998	N	Y
Transtar Communications, L.C.	SPCOA	03/05/1997	N	Y
Trinity Telephone, d/b/a ADN Enterprises, Inc. and North Texas Telecommunications	SPCOA	05/06/1998	N	Y
Trinity Valley Services, Inc.	SPCOA	03/26/1999	Y	Y
TVS Communications, Inc.	SPCOA	09/05/2000	New	N
Twister Communications Network, Inc.	SPCOA	08/26/1999	N	N
TXNet Communications	SPCOA	05/21/1998	N	N
TXOL Internet	SPCOA	05/09/2000	New	Y
U.S. Communications, Inc.	SPCOA	05/22/1996	N	N
U.S. Dial Tone, L.P., d/b/a Texas Dial Tone, Inc., U.S. Dial Tone, Inc.	SPCOA	06/05/1997	Y	Y
U.S. Metroline Services, Inc.	SPCOA	05/01/2000	New	Y
U.S. OnLine, d/b/a U.S. OnLine Communications, Inc. U.S. OnLine Communications, L.L.C., USOL, Inc.	SPCOA	02/10/2000	New	N
U.S. Telco, Inc.	SPCOA	05/08/1996	N	Y
U.S. West Interprise America, Inc.			1	
	SPCOA	07/16/1997	Y	Y
UAI, Inc.	SPCOA SPCOA	07/16/1997 11/04/1999	Y N	Y N

Utility Name	Type of Certification	Date Issued	Replied to Data Request	ICA
United Communications Systems	SPCOA	03/26/1999	N	Y
United Tel-A-Call	SPCOA	10/06/1999	N	N
Uni-Tel	SPCOA	11/20/1998	N	N
URJET Backbone Network, Inc.	SPCOA	01/27/2000	New	N
US LEC Communications, Inc.	SPCOA	01/27/2000	New	N
US Long Distance, d/b/a USLD Communications, Inc.	SPCOA	05/18/2000	New	Y
USA Digital Communications, Inc.	SPCOA	05/09/2000	New	N
USA Quick Phone, Inc.	SPCOA	02/10/2000	New	Y
USCom Telephone, Inc.	SPCOA	04/30/1999	Y	Y
Utel, d/b/a United Telephone Company	SPCOA	08/13/1998	Y	Y
UTEX Communications Corp.	SPCOA	06/14/2000	New	Y
Valence Comm. Services, Ltd.	SPCOA	04/09/1999	Y	Y
Valley Telecom Group, Inc. d/b/a Valley Telephone Cooperative, Inc.	SPCOA	11/06/2000	New	N
Valor Telecommunications CLEC of Texas, LP	SPCOA	10/02/2000	New	Y
Valu-Net, Inc.	SPCOA	12/12/1996	N	Y
VarTec Telecom, Inc.	SPCOA	06/17/1999	N	Y
Vectris Telecom, Inc.	SPCOA	01/27/2000	New	Y
Verizon Advanced Data, Inc.,	COA	08/21/2000	New	Y
d/b/a Bell Atlantic Network Data, Inc.	COA	00/21/2000		
Verizon Select Services, Inc., d/b/a GTECC, GTE Communications Corporation, GTE Card Services, Inc.	COA	10/30/1997	Y	Y
Verizon Southwest, d/b/a GTE Southwest, Incorporated	COA	05/18/2000	New	Y
Vitts Networks, Inc.	SPCOA	10/03/2000	New	N
Voice2, Inc.	SPCOA	06/03/1999	N	N
W.T. Services, Inc.	COA	02/21/1997	Y	Y
Waller Creek Communications, Inc.	SPCOA	06/27/1997	Y	Y
Waymark Communications, d/b/a Waymark Internet Services, Inc., d/b/a Waymark Communications	SPCOA	07/10/2000	New	N
Web Fire Communications, Inc.	SPCOA	09/09/1999	Y	Y
Westel, Inc.	SPCOA	12/08/1995	Y	Y
Western Integrated Networks of Texas Operating, L.P.	SPCOA	02/10/2000	Y	Y
WESTEX Telecom	SPCOA	10/06/1999	N	Y
Wholesale Network, Inc.	SPCOA	03/26/1997	N	Y
WideOpenWest Texas, LLC	SPCOA	04/27/2000	New	N
Williams Local Network, Inc.	SPCOA	04/27/2000	New	N
WinStar Wireless, Inc., d/b/a WinStar Wireless of Texas, Inc.	SPCOA	05/22/1996	Y	Y
WorkNet Communications, Inc.	SPCOA	01/13/2000	New	Y
World Access Communications Corporation	SPCOA	09/24/1998	N	N
WorldCom Technologies, Inc., d/b/a WorldCom, Inc., WorldCom Technologies, Inc., MFS Intelnet of Texas, Inc., MFS Network Technologies, Inc., and MFS Communications Company	SPCOA	09/15/1997	Y	Y
XIT Telecommunications & Technology, Inc.	COA	04/23/1997	Y	Y
Yipes Transmission, Inc.	SPCOA	07/18/2000	New	N
Z-Tel Communications, Inc.	SPCOA	08/12/1998	N	Y

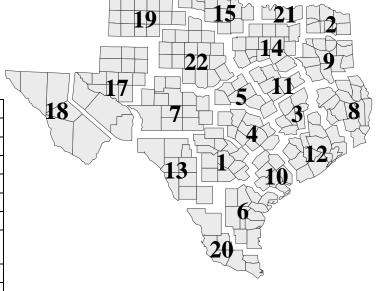
APPENDIX H: PUC DATA COLLECTION – REGIONAL GROUPINGS AND DATA REQUESTED

Parties in these proceedings explored methods by which to gather and aggregate useful information without compromising confidentiality of competitively sensitive data. As a result, the data are first aggregated by county, and then the largest counties in the state are grouped according to size. Because the Rural category of counties (populations below 100,000) still varied so widely in both population and access to services, data for them were separated by geographic area and by size grouping. The geographic areas used for this study correspond to

boundaries of the 24 Councils of Government (COGs) areas in Texas, with two exceptions. Within each of the 22 resulting geographic areas, then, the counties were separated into three population size groupings.

Regional Groupings

1	Alamo Area C. O. G.
2	Ark-Tex C. O. G.
3	Brazos Valley C. O. G.
4	Capital Area P. C.
5	Central Texas C. O. G.
6	Coastal Bend C. O. G.
7	Concho Valley C. O. G.
8	Deep East Texas C. O. G. (Incl. S. E. Texas R. P. C.)
0	`
9	East Texas C. O. G.
10	Golden Crescent R. P. C.
11	Heart of Texas C. O. G.
12	Houston-Galveston A. C.
13	Middle Rio Grande D. C.
14	North Central Texas C. O. G.
15	North Texas R. P. C.
16	Panhandle R. P. C.



17	Permian Basin R. P. C.
18	Rio Grande C. O. G.
19	South Plains A. G.
20	South Texas D. C. (includes
	Lwr Rio Grande Val. D. C.)
21	Texoma C. O. G.
22	West Central Texas C. O. G.

¹¹⁸ To further protect confidentiality, counties in the Deep East Texas Council of Governments are combined with the South East Texas Regional Planning Commission, and counties in the South Texas Development Council are combined with the Lower Rio Grande Valley Development Council.

Data Collection: A Regional Approach

In a recent FCC report on the deployment of advanced services, the FCC found a strong correlation between deployment of advanced services and population density and income of an area. This finding is consistent with the historical spread of telephone service in Texas and other places in the country. The large cities were the first to get telephone service. While the private sector readily provided telephone service to densely populated and wealthy areas in Texas, residents in the poorer and more rural areas of Texas formed utility cooperatives to provide telephony to areas that private-sector companies found insufficiently profitable.

In order to capture the unfolding of competition in Texas, the Commission developed a data collection instrument that collected data on a regional basis that reflects the diversity of the Texas population. Commission staff designed the categories of data requested to show the level and growth of competition across different areas of Texas and to provide information as to the distinction among facility-based providers and resellers. The questions asked in the data request are shown below in this appendix.

When responding to the data collection instrument, CLECs and ILECs aggregated the data first by county, and then the largest counties in the state are grouped according to size, as charted earlier in Chapter 3 of this *Report*.¹²⁰ Because the Rural category of counties still varied so widely in both population and access to services, data for them was separated by geographic area and by size grouping. The geographic areas used for this study correspond to boundaries of the 24 Councils of Government (COGs) areas in Texas, with two exceptions.¹²¹ Within each of the 22 resulting geographic areas, then, the rural counties were separated into three population size groupings.¹²² In this manner, the CLECs and ILECs reported their data used this report in 69 geographic and size groupings. Below follows a cross-reference between the county name and the geographic/size reporting area to which the county has been assigned.

¹¹⁹ Deployment of Advanced Telecommunication Capability: Second Report, [CC Docket No. 98-146] Federal Communications Commission, at 40-42 (August 2000).

 $^{^{120}}$ Counties with over 600,000 people form Group 1 – Large Metro. Counties with over 100,000 people that are in the same metro are as the counties in Group 1 form Group 2 – Suburban. Counties with at least 100,000 people that are not already in Groups 1 and 2 form Group 3 – Medium and Small Metro. Counties with fewer than 100,000 people form Group 4 – Rural.

¹²¹ To further protect confidentiality, counties in the Deep East Texas Council of Governments are combined with the South East Texas Regional Planning Commission, and counties in the South Texas Development Council are combined with the Lower Rio Grande Valley Development Council.

 $^{^{122}}$ By size: counties below 5,000 population, those between 5,000 and 20,000, and those between 20,000 and 100,000.

Table 32 – Population Categories for Scope of Competition Report Data Collection

Group 1 (Large Metro):	Counties with over 600,000 people
Group 2 (Suburbs):	Counties with over 100,000 that are in the same metro area as the counties in Group 1
Group 3 (Medium & Small Metro):	Counties with at least 98,000 people that are not in Groups 1 & 2
Group 4 (Rural):	Counties with fewer than 98,000 people

County Population Aggregation Groupings

Large Metro (Group 1) Counties

Harris	3,158,095	Tarrant	1,327,332
Dallas	2,023,140	El Paso	701,576
Bexar	1,359,993	Travis	693,606

Suburban (Group 2) Counties: Larger Counties near Metro Areas

Collin	401,352	Galveston	242,979
Denton	365,058	Brazoria	225,406
Fort Bend	321,149	Williamson	210,477
Montgomery	258 127		

Small and Medium Metro (Group 3) Counties: Other Larger Counties

Hidalgo	510,922	Ector	124,727
Cameron	320,801	Taylor	121,456
Nueces	317,474	Midland	118,662
Jefferson	241,940	Johnson	114,052
Lubbock	230,672	Gregg	113,147
Bell	222,302	Potter	109,243
McLennan	202,983	Tom Green	102,648
Webb	183,219	Grayson	101,541
Smith	166,723	Ellis	100,627
Brazos	133,008	Randall	98,922
Wichita	128,827		

Rural Counties -

Alamo Area Council of Governments

Over 20,000		
Kendall	20,394	
Wilson	30,194	
Atascosa	35,268	
Medina	36,827	
Kerr	42,623	
Comal	70,682	
Guadalupe	77,963	

5,001 – 20,000	
Karnes	12,501
Bandera	15,005
Frio	15,875
Gillespie	19,909

5,000 or Less	
(None)	

Ark-Tex Council of Governments

Over 20,000		
Titus	25,245	
Cass	30,518	
Hopkins	30,535	
Lamar	45,772	
Bowie	83,672	

5,001 – 20,000	
Franklin	9,589
Morris	13,302
Red River	13,794

5,000 or Less	
Delta	4,941

Brazos Valley Council of Governments

Over 20,000		
Grimes	22,846	
Washington	29,033	

5,001 – 20,000	
Madison	11,932
Leon	14,450
Burleson	15,368
Robertson	15,534

5,000 or Less	
(None)	

Capital Area Planning Council

Over 20,000		
Fayette	21,101	
Burnet	30,755	
Caldwell	31,625	
Bastrop	49,031	
Hays	86,284	

5,001 – 20,000	
Blanco	8,213
Llano	13,104
Lee	14,792

5,000 or Less	
(None)	

Central Texas Council of Governments

Over 20,000		
Milam	24,266	
Coryell	77,438	

5,001 - 20,000		
San Saba	6,424	
Hamilton	7,608	
Lampasas	17,491	

5,000 or Less		
Mills	4,771	

Coastal Bend Council of Governments

Over 20,000	
Aransas	22,579
Bee	28,054
Kleberg	30,216
Jim Wells	39,842
San Patricio	69,626

5,001 – 20,000	
Brooks	8,458
Live Oak	10,157
Duval	13,607

5,000 or Less	
Kenedy	427
McMullen	783

Concho Valley Council of Governments

Over 20,000	
(None)	

5,001 – 20,	,000
Refugio	7,882 8,778
McCulloch	8,778

5,000 or Less	
Sterling	1,385
Irion	1,696
Menard	2,333
Schleicher	3,047
Concho	3,104
Coke	3,426
Mason	3,650
Kimble	4,199
Reagan	4,228
Sutton	4,437
Crockett	4,518

Deep East Texas Council of Governments (Includes South East Texas Regional Planning Commission)

Over 20,000	
Tyler	20,107
San Jacinto	20,860
Houston	21,884
Shelby	22,652
Jasper	33,203
Polk	47,452
Nacogdoches	56,716
Angelina	76,799
Hardin	48,403
Orange	84,648

5,001 - 20,000	
San Augustine	8,184
Sabine	10,565
Trinity	12,410
Newton	14,418

5,000 or Less (None)	
(None)	

East Texas Council of Governments

Over 20,000	
Panola	23,005
Wood	34,170
Upshur	35,416
Cherokee	42,778
Van Zandt	42,998
Rusk	45,636
Anderson	52,540
Harrison	59,687
Henderson	67.347

5,001 - 20,000	
Rains	8,213
Marion	10,672
Camp	10,978

5,000 or Less	
(None)	

Golden Crescent Regional Planning Commission

Over 20,000	
Calhoun	20,806
Victoria	82,024

5,001 - 20,000	
Goliad	6,776
Jackson	13,656
Gonzales	17,569
Lavaca	18,676
Dewitt	19,674

5,000 or Less	
(None)	

Heart of Texas Council of Governments

Over 20,000	
Limestone	21,059
Hill	30,033

5,001 - 20,000	
Bosque	16,674
Freestone	17,540
Falls	17,747

5,000 or Less	
(None)	

Houston-Galveston Area Council

Over 20,000	
Austin	22,903
Chambers	23,545
Waller	26,792
Matagorda	37,910
Wharton	40,146
Walker	54,528
Liberty	63,948

5,001 - 20,000	
Colorado	18,880

5,000 or Less	
(None)	

Middle Rio Grande Development Council

Over 20,000	
Uvalde	25,619
Val Verde	43,115
Maverick	47,877

5,001 - 20,000	
LaSalle	5,935
Dimmitt	10,486
Zavala	11,955

5,000 or Less	
Real	2,686
Kinney	3,481
Edwards	3,738

North Central Texas Council of Governments

Over 20,000	
Palo Pinto	25,494
Erath	31,275
Rockwall	35,923
Hood	36,205
Navarro	41,366
Wise	42,387
Kaufman	63,857
Hunt	69,309
Parker	78,811

5,001 - 20,000	
Sovervell Jack	6,235
Jack	7,314

5,000 or Less	
(None)	

North Texas Regional Planning Commission

Over 20,000	
(None)	

5,001 - 20,000	
Archer	8,276
Clay	10,407
Wilbarger	14,138
Young	17,575
Montague	18,290

5,000 or Less	
Foard	1,726
Cottle	1,957
Baylor	4,165
Hardeman	4,701

Panhandle Regional Planning Commission

Over 20,000	
Gray	23,719
Hutchinson	23,973

5,001 - 20,000	
Hartley	5,121
Wheeler	5,309
Hansford	5,396
Dallam	6,361
Carson	6,698
Childress	7,630
Castro	8,307
Swisher	8,347
Ochiltree	8,902
Parmer	10,475
Deaf Smith	19,448
Moore	19,510

5,000 or Less	
Roberts	988
Briscoe	1,982
Armstrong	2,172
Oldham	2,219
Sherman	2,905
Lipscomb	3,027
Collingsworth	3,330
Hemphill	3,618
Hall	3,705
Donley	3,810

Permian Basin Regional Planning Commission

Over 20,000	
Howard	32,562

5,001 - 20,000	
Martin	5,078
Winkler	8,037
Ward	11,891
Andrews	14,072
Dawson	14,793
Reeves	14,856
Gaines	14,985
Pecos	16,196

5,000 or Less	
Loving	106
Borden	748
Terrell	1,189
Glasscock	1,454
Upton	3,815
Crane	4,557

Rio Grande Council of Governments

Over 20,000	
(None)	

5,001 – 20,000	
Presidio	8,577
Brewster	9,039

5,000 or Less	
Jeff Davis	2,234
Culberson	3,136
Hudspeth	3,328

South Plains Association of Governments

Over 20,000	
Hockley	23,933
Hale	36,603

5,001 – 20,000	
Lynn	6,591
Bailey	6,831
Crosby	7,375
Yoakum	8,169
Floyd	8,213
Terry	13,003
Lamb	14,849

5,000 or Less	
King	348
Motley	1,280
Dickens	2,254
Cochran	3,978
Garza	4,632

South Texas Development Council (includes Lower Rio Grande Valley Development Council

Over 20,000	
Starr	55,560

5,001 – 20,000	
Zapata	11,266
Willacy	19,662

5,000 or Less	
Jim Hogg	4,925

Texoma Council of Governments

Over 20,000	
Fannin	27,655
Cooke	32,989

5,001 – 20,000	
(None)	

5,000 or Less	
(None)	

West Central Texas Council of Governments

Over 20,000						
Brown	36,903					

5,001-20,	,000
Haskell	6,107
Mitchell	8,768
Coleman	9,590
Stephens	9,902
Runnels	11,457
Callahan	12,816
Comanche	13,595
Nolan	16,486
Eastland	17,857
Scurry	18,185
Jones	18,803

5,000 or Less					
Kent	863				
Throckmorton	1,704				
Stonewall	1,807				
Shackelford	3,335				
Knox	4,309				
Fisher	4,352				

Data Request 2000

The Data Request used to gather information from telecommunications providers requested the information outlined below, broken out into the above geographic and size regions when indicated:

General Information:

Name of the Certificated Telecommunication Utility (CTU) (not the d/b/a name)

Whether company is an ILEC or a CLEC

Type of certificate your company holds: (CCN, SPCOA, or COA)

Contact Person: (Street Address, City, Zip Code, Phone Number, Fax Number, Email Address)

Statewide Information (For 1998 & 1999):

Basic Local Exchange Service Revenue

Percentage of [a] that is Residential Service

Services typically included with the company's basic local service rate.

Long Distance (For 1997, 1998, & 1999):

- Intrastate originating switched access minutes of use purchased (Statewide):
- AT&T, MCIW, SPRINT
- All Others
- Long Distance Revenues (Statewide)
- IntraLATA MTS 1+
- IntraLATA MTS not 1+
- InterLATA Intrastate
- Intrastate WATS (Inward e.g., 800 services)
- Intrastate WATS (Outbound)

Statewide Infrastructure & Universal Service (all CTUs) (For Year End 1998 & 1999):

A. Universal Service

- # of households participating in Tel-Assistance
- # of households participating in Link-Up America
- # of households participating in other lifeline programs

B. BETRS technology

- # of customers served by BETRS technology
- Names of exchanges that used the BETRS technology in 1999.

C. # of local switches deployed by exchange size (Statewide): (classified by # of working access lines in basic local exchange calling scope)

- Number of lines for the following exchange size categories:
 <3,000 lines, 3,000 31,000, 31,001 100,000, 100K 300K, Over 300K
- D. Switch distribution (Statewide):

- # of switches providing only local service
- # of switches providing combined Toll & Local, Toll Only, or Tandem EAS/ Toll

Retail, for each of the following categories: Category 1 Residential Lines, Category 2 Non-Residential Lines, Category 3 Point-to-Point (all CTUs):

(By Regional Group & Population Category)

- # of access lines entirely provided using your own network facilities
- # of access lines entirely provided by purchasing retail services at wholesale discount
- # of access lines provided by purchasing UNEs
- Annual revenues from respective category (Category 1, 2, 3)

Interconnection Trunks (CLECs Only) and Payphones (all CTUs) (For 1998 & 1999):

(By Regional Group & Population Category)

CLECs Only:

- Total # of voice-grade equivalent interconnection circuits you have with ILECs
- Total # of voice-grade equivalent interconnection circuits you have with Non-ILECs

All CTUs:

- # of payphones provided by your CTU
- #of payphone lines provided by your CTU to payphone providers

Wholesale Services - UNE Loops:

(By Regional Group & Population Category & in # of Units and Revenue for 1998 & 1999)

- Lines provided under a UNE loop arrangement where your company DID NOT provide switching for the line.
- Lines provided under a UNE loop arrangement where your company DID provide switching for the line.

Wholesale Services- Resale & Other Information:

(By Regional Group & Population Category & in # of Units and Revenues for 1998 & 1999)

- Lines Provided Under Total Service Resale Agreements.
- Interconnection Trunks

Wholesale Services – Dark Fibers, Collocation and Other Information:

(By Population Category & in # of Units & Revenues for 1998 & 1999)

- Dark Fiber UNE Arrangements
- Collocation
- # of IXC Customers Purchasing FGD Access

Infrastructure by Region (For 1998 & 1999:

- Regional Group
- Population Category
- Net Investment in Plant Facilities (Year-End)
- Annual Construction Expenditures
- Percentage of Annual Construction Expenditure for that is for the provision of local exchange service.

Advanced Services Report:

- Regional Group
- Population Category
- Total # of access lines
- # of ISDN-BRI access lines
- # of T-1 access lines
- # of xDSL access lines
- # of other access lines >200Kbps (downlink)
- # of all access lines >200Kbps (downlink) provided within a radius of 18Kf from the CO
- % of COs that are SS7 Capable
- % of CO w/ digital switch
- # of fiber loops end to end
- # of copper loops end to end (<12Kf, 12Kf-18Kf, >18Kf)
- Avg. length of a copper loop end to end (in ft.)
- # of DLC loops
- Avg. DLC loop length (in ft.)
- # of WLL loops
- Max. downlink data rate for WLL loops
- % of COs providing xDSL services?
- % of COs for which a xDSL study was done?
- Estimated date in which xDSL services will be offered (MM/YY)
- % of COs for which no estimated date for xDSL services is available?
- List all the COs (by CLLI) without an ISP retail customer served by the reporting carrier

General Access Revenue, MOU Data and Access Line Count (1995 to 1999 and 01/00 to 04/00):

- Total Revenues: Switched and Special
- Total Minutes of Use (Switched)
- Total number of access lines (residential and non-residential) providing service to end use customers. Exclude private lines and provide total termination counts for PBX and Plexar (resale vs. wholesale).
- Total number of Special Access/Private lines/ Dedicated circuits (T1 capacity or greater and/or voice grade lines) provided to end use customers. (resale vs. wholesale).
- Total Number of Unbundled Loops

APPENDIX I: SOCIOECONOMIC PROFILE OF TEXAS

The following subsections profile the population, population density, and *per capita* income of Texas by county or region for this report, which is consistent with the breakdown of the data by region used in the data collection instrument.

Population

The population of Texas as of January 1, 1999, was 19.9 million. (See Table 33) Though Texas is a large state geographically, much of its population is clustered in urban areas. The Large Metro areas had a population of 9.4 million, or nearly half of the population of Texas. Together, the Suburban and Large Metro areas represent nearly 60% of the Texas population. The Small and Medium Metro areas of Texas represent about one fifth of the Texas population, as do the Rural areas of Texas.

Table 33 – Texas Population by Group

Group	Description	1990	1999	Percent of Total in 1999	Growth Rate 1990-1999
1	Large Metro	8,194,425	9,439,438	47.4%	15.2%
2	Suburban	1,493,837	2,161,912	10.8%	44.7%
3	Medium and Small Metro	3,319,290	3,851,471	19.3%	16.0%
4	Rural	3,978,783	4,472,756	22.4%	12.4%
Total	State of Texas	16,986,335	19,925,577	100.0%	17.3%

Source: Texas State Data Center

The population of Texas has been growing rapidly in the past decade, especially in the Suburban areas. The population of Texas grew from 17.0 million in 1990 to 19.9 million in 1999, an increase of 17.3 percent overall, but the Suburban areas grew 44.7%. Growth in each of the other three categories was shared rather evenly, at levels near the statewide average.

However, within the Rural category, the growth rates varied widely, as can be observed in the table below. Of the 4.5 million people living in Rural areas of Texas in 1999, 72.4 percent lived in counties with a population of 20,000 or more residents. Those counties saw population growth of 15.3 percent. Only 138,000 people, or less than one percent of the population of Texas, lived in counties that had 5,000 people or fewer, and those counties saw an actual decrease in population of 0.6%.

			Percent of Rural	Growth Rate
Population in 1999	1990	1999	in 1999	1990-1999
20,001 - 100,000	2,807,429	3,236,801	72.4%	15.3%
5,001 - 20,000	1,032,327	1,097,771	24.5%	6.3%
0 to 5,000	139,027	138,184	3.1%	-0.6%
Rural Total	3,978,783	4.472.756	100.0%	12.4%

Table 34 – Population in Rural Areas of Texas by Size of County

Source: Texas State Data Center

Population Density

Figure 16 shows population density by county for Texas in 1999. Not surprisingly, population density is high along the I35 corridor from San Antonio to the Oklahoma border, in the Houston/Galveston area, and in El Paso. Population densities are much higher on average in rural areas of East Texas than in rural areas of West Texas, with many counties in West Texas having fewer than five people per square mile.

Income

Figure 17 shows the *per capita* income by county for Texas in 1998. The wealthiest areas in Texas (incomes greater than \$25,000) are metropolitan areas of Dallas / Fort Worth, Houston, and Austin. Other areas of the state showing high *per capita* incomes are areas associated with the oil industry: the northern Panhandle and Midland County in West Texas, and Smith County (Tyler metro area) in East Texas. Income in the oil-producing areas is more volatile than in the Large Metropolitan areas of Texas. The poorest areas in the state (incomes less than \$13,500) are adjacent to or near the Rio Grande Valley and in West Texas.

Figure 16 – Population Density of Texas by County in 1999

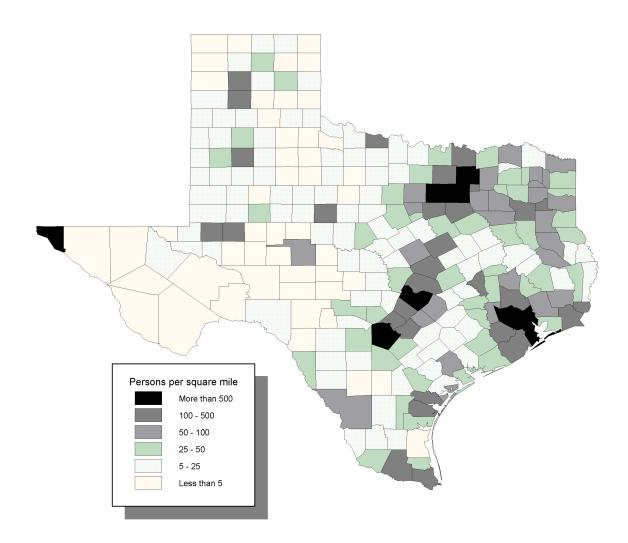
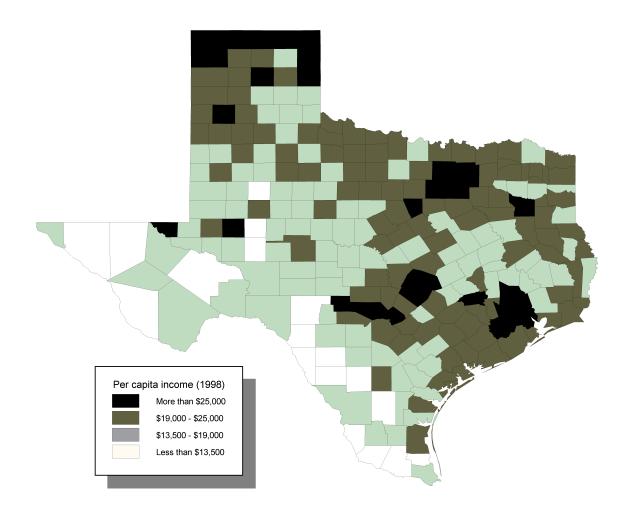


Figure 17 – Per Capita Income of Texas by County in 1998



APPENDIX J: ILEC AND CLEC COMPARATIVE DATA

The following four tables contain summary comparisons of ILEC and CLEC access lines and revenues for year-end 1998 and 1999, as reported by the carriers in their responses to the PUC's data request. For the purpose of these tables, residential and business data are combined.

Table 35 – Comparison of 1998 ILEC and CLEC Access Lines

Regional Group	Population Category	Po	sidon	1998 tial & Busine	se Lin	05
regional Group	Category	ILEC	%	CLEC	% Link	Total
Large Metro (Group 1)	Over 600,000	5,780,957	97.0	179,921	3.0	5,960,878
Suburban (Group 2)	Near Metro	844,456	96.9	27,136	3.1	871,592
Small and Medium Metro (Group3)	Large - Other	1,782,022	98.6	25,491	1.4	1,807,513
Alamo Area Council of Governments	1-5,000	0		0		0
Alamo Area Council of Governments	5,001-20,000	66,579	99.9	34	0.1	66,613
Alamo Area Council of Governments	20,001-100,000	204,545	99.9	215	0.1	204,760
Ark-Tex Council of Governments	1-5,000	531	100.0	0	0.0	531
Ark-Tex Council of Governments	5,001-20,000	36,728	100.0	2	0.0	36,730
Ark-Tex Council of Governments	20,001-100,000	116,084	99.9	59	0.1	116,143
Brazos Valley Council of Governments	1-5,000	0		0		<u> </u>
Brazos Valley Council of Governments	5,001-20,000	31,354	99.7	101	0.3	31,455
Brazos Valley Council of Governments	20,001-100,000	30,481	99.6	123	0.4	30,604
Capital Area Planning Council	1-5,000	0		0		0
Capital Area Planning Council	5,001-20,000	21,783	99.8	35	0.2	21,818
Capital Area Planning Council	20,001-100,000	122,114	99.9	64	0.1	122,178
Central Texas Council of Governments	1-5,000	22,232	100.0	2	0.0	22,234
Central Texas Council of Governments	5,001-20,000	50,107	100.0	16	0.0	50,123
Central Texas Council of Governments	20,001-100,000	75,729	99.9	54	0.1	75,783
Coastal Bend Council of Governments	1-5,000	612	100.0	0	0.0	612
Coastal Bend Council of Governments	5,001-20,000	17,624	99.6	63	0.4	17,687
Coastal Bend Council of Governments	20,001-100,000	126,419	99.8	244	0.2	126,663
Concho Valley Council of Governments	1-5,000	21,300	99.7	61	0.3	21,361
Concho Valley Council of Governments	5,001-20,000	3,907	99.9	5	0.1	3,912
Concho Valley Council of Governments	20,001-100,000	100		0		0
Deep East Texas Council of Governments	1-5,000	10		0		0
Deep East Texas Council of Governments	5,001-20,000	22,072	99.2	188	0.8	22,260
Deep East Texas Council of Governments	20,001-100,000	362,679	99.7	1,063	0.3	363,742
East Texas Council of Governments	1-5,000	/0		0		1 0
East Texas Council of Governments	5,001-20,000	79,543	100.0	4	0.0	79,547
East Texas Council of Governments	20,001-100,000	170,923	99.9	148	0.1	171,071
Golden Crescent Regional Planning Com.	1-5,000	/ 0///////////////////////////////////		10		S
Golden Crescent Regional Planning Com.	5,001-20,000	36,775	99.8	66	0.2	36,841
Golden Crescent Regional Planning Com.	20,001-100,000	57,635	99.8	88	0.2	57,723

Regional Group	Population Category	Re	sident	1998 tial & Busine	ss I ind	26
regional Group	outegory	ILEC	%	CLEC	%	Total
Heart of Texas Council of Governments	1-5,000			///////////////////////////////////////		
Heart of Texas Council of Governments	5,001-20,000	57,714	99.9	46	0.1	57,760
Heart of Texas Council of Governments	20,001-100,000	35,690	99.8	54	0.2	35,744
Houston-Galveston Area Council	1-5,000			(((()))		
Houston-Galveston Area Council	5,001-20,000	10,747	99.4	70	0.6	10,817
Houston-Galveston Area Council	20,001-100,000	305,197	98.2	5,726	1.8	310,923
Middle Rio Grande Development Council	1-5,000	7,260	99.8	16	0.2	7,276
Middle Rio Grande Development Council	5,001-20,000	10,566	99.8	23	0.2	10,589
Middle Rio Grande Development Council	20,001-100,000	47,360	99.9	57	0.1	47,417
North Central Texas Council of Gov'ts	1-5,000			0		
North Central Texas Council of Gov'ts	5,001-20,000	30,759	99.9	20	0.1	30,779
North Central Texas Council of Gov'ts	20,001-100,000	1,044,665	99.9	873	0.1	1,045,538
North Texas Regional Planning Com.	1-5,000	10,397	99.4	59	0.6	10,456
North Texas Regional Planning Com.	5,001-20,000	49,364	99.0	522	1.0	49,886
North Texas Regional Planning Com.	20,001-100,000	100		0		/0
Panhandle Regional Planning Commission	1-5,000	17,395	91.1	1,706	8.9	19,101
Panhandle Regional Planning Commission	5,001-20,000	59,910	97.4	1,602	2.6	61,512
Panhandle Regional Planning Commission	20,001-100,000	36,776	98.4	596	1.6	37,372
Permian Basin Regional Planning Com.	1-5,000	7,664	99.8	15	0.2	7,679
Permian Basin Regional Planning Com.	5,001-20,000	45,037	98.8	551	1.2	45,588
Permian Basin Regional Planning Com.	20,001-100,000	15,079	98.6	216	1.4	15,295
Rio Grande Council of Governments	1-5,000	6,665	100.0	0	0.0	6,665
Rio Grande Council of Governments	5,001-20,000	286	98.3	5	1.7	291
Rio Grande Council of Governments	20,001-100,000	/ 00		0		9
South Plains Association of Governments	1-5,000	3,827	99.8	7	0.2	3,834
South Plains Association of Governments	5,001-20,000	30,595	99.7	101	0.3	30,696
South Plains Association of Governments	20,001-100,000	31,169	99.0	327	1.0	31,496
South Texas Development Council	1-5,000	2,520	99.5	12	0.5	2,532
South Texas Development Council	5,001-20,000	10,150	99.9	12	0.1	10,162
South Texas Development Council	20,001-100,000	16,461	99.7	44	0.3	16,505
Texoma Council of Governments	1-5,000	/ 0		0		9
Texoma Council of Governments	5,001-20,000	18		0		/\$
Texoma Council of Governments	20,001-100,000	33,544	99.9	30	0.1	33,574
West Central Texas Council of Gov'ts	1-5,000	22,465	99.9	13	0.1	22,478
West Central Texas Council of Gov'ts	5,001-20,000	80,299	99.7	246	0.3	80,545
West Central Texas Council of Gov'ts	20,001-100,000	20,361	99.8	34	0.2	20,395

12,135,113 98.0 248,166 2.0 12,383,279

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Table 36 – Comparison of 1999 ILEC and CLEC Access Lines

Heart of Texas Council of Governments 5,001-20,000 59,312 99.4 340 0.6 59,652 Heart of Texas Council of Governments 20,001-100,000 37,961 98.4 634 1.6 38,595 Houston-Galveston Area Council 1-5,000 99.5 522 4.5 11,688 Houston-Galveston Area Council 5,001-20,000 11,166 95.5 522 4.5 11,688 Houston-Galveston Area Council 20,001-100,000 316,596 97.4 8,335 2.6 324,931 Middle Rio Grande Development Council 1-5,000 7,710 98.4 124 1.6 7,834 Middle Rio Grande Development Council 5,001-20,000 10,916 97.5 280 2.5 11,196 Middle Rio Grande Development Council 20,001-100,000 48,858 99.0 495 1.0 49,353 North Central Texas Council of Gov'ts 1-5,000 32,756 98.0 683 2.0 33,439 North Central Texas Council of Gov'ts 20,001-100,000 1,084,092 99.3		Population					
Large Metro (Group 1)	Regional Group	Category					
Suburban (Group 2) Near Metro 895,389 88.6 115,644 11.4 1,011,033 Small and Medium Metro (Group3) Other Large 1,846,335 94.7 102,685 5.3 1,949,020 0.0			_				
Small and Medium Metro (Group3)	,						
Alamo Area Council of Governments	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \						
Alamo Area Council of Governments			1,846,335	94.7		5.3	1,949,020
Alamo Area Council of Governments							0
Ark-Tex Council of Governments							
Ark-Tex Council of Governments							
Ark-Tex Council of Governments							
Brazos Valley Council of Governments 1-5,000 0 0 0 Brazos Valley Council of Governments 5,001-20,000 32,617 98.2 598 1.8 33,215 Brazos Valley Council of Governments 20,001-100,000 32,002 97.3 874 2.7 32,876 Capital Area Planning Council 1.5,000 0 0 0 0 Capital Area Planning Council 20,001-100,000 129,578 99.2 984 0.8 130,552 Central Texas Council of Governments 1.5,000 23,477 99.8 58 0.2 23,553 Central Texas Council of Governments 5,001-20,000 51,408 99.3 353 0.7 51,761 Central Texas Council of Governments 1.5,000 632 55.4 509 44.6 1,141 Coastal Bend Council of Governments 5,001-20,000 17,879 99.0 185 1.0 18,064 Coastal Bend Council of Governments 20,001-100,000 140,152 99.1 1,281 0.9 141,433							
Brazos Valley Council of Governments 5,001-20,000 32,617 98.2 598 1.8 33,215 Brazos Valley Council of Governments 20,001-100,000 32,002 97.3 874 2.7 32,876 Capital Area Planning Council 15,000 0 0 0 0 Capital Area Planning Council 5,001-20,000 22,995 97.6 556 2.4 23,551 Capital Area Planning Council 20,001-100,000 129,578 99.2 984 0.8 130,562 Central Texas Council of Governments 1-5,000 23,477 99.8 58 0.2 23,535 Central Texas Council of Governments 5,001-20,000 51,408 99.3 353 0.7 51,761 Central Texas Council of Governments 1-5,000 632 55.4 509 44.6 1,41 Coastal Bend Council of Governments 5,001-20,000 17,879 99.0 185 1.0 18,04 Coastal Bend Council of Governments 20,001-100,000 140,152 99.1 1,281 0.9 <td></td> <td></td> <td>121,241</td> <td>99.1</td> <td>1,117</td> <td>0.9</td> <td>122,358</td>			121,241	99.1	1,117	0.9	122,358
Brazos Valley Council of Governments 20,001-100,000 32,002 97.3 874 2.7 32,876 Capital Area Planning Council 1-5,000 0 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>0</td>							0
Capital Area Planning Council 1-5,000 0 0 0 Capital Area Planning Council 5,001-20,000 22,995 97.6 556 2.4 23,551 Capital Area Planning Council 20,001-100,000 129,578 99.2 984 0.8 130,562 Central Texas Council of Governments 1-5,000 23,477 99.8 58 0.2 23,535 Central Texas Council of Governments 5,001-20,000 51,408 99.3 353 0.7 51,761 Central Texas Council of Governments 20,001-100,000 79,762 99.2 631 0.8 80,333 Coastal Bend Council of Governments 5,001-20,000 17,879 99.0 185 1.0 18,064 Coastal Bend Council of Governments 1,5000 21,278 98.6 301 1.4 21,579 Concho Valley Council of Governments 1,5000 21,278 98.6 301 1.4 21,579 Concho Valley Council of Governments 20,001-100,000 3,984 99.3 27 0,7 4,011		5,001-20,000			598		
Capital Area Planning Council 5,001-20,000 22,995 97.6 556 2.4 23,551 Capital Area Planning Council 20,001-100,000 129,578 99.2 984 0.8 130,562 Central Texas Council of Governments 1-5,000 23,477 99.8 58 0.2 23,535 Central Texas Council of Governments 5,001-20,000 51,408 99.3 353 0.7 51,761 Central Texas Council of Governments 20,001-100,000 79,762 99.2 631 0.8 80,393 Coastal Bend Council of Governments 1.5,000 632 55.4 509 44.6 1,141 Coastal Bend Council of Governments 20,001-100,000 140,152 99.1 1,281 0.9 141,433 Concho Valley Council of Governments 1.5,000 21,278 98.6 301 1.4 21,579 Concho Valley Council of Governments 5,001-20,000 3,984 99.3 27 0.7 4,011 Concho Valley Council of Governments 5,001-20,000 37,275 96.3 </td <td>•</td> <td></td> <td>32,002</td> <td>97.3</td> <td>874</td> <td>2.7</td> <td>32,876</td>	•		32,002	97.3	874	2.7	32,876
Capital Area Planning Council 20,001-100,000 129,578 99.2 984 0.8 130,562 Central Texas Council of Governments 1-5,000 23,477 99.8 58 0.2 23,535 Central Texas Council of Governments 5,001-20,000 51,408 99.3 353 0.7 51,761 Central Texas Council of Governments 20,001-100,000 79,762 99.2 631 0.8 80,333 Coastal Bend Council of Governments 1-5,000 632 55.4 509 44.6 1,141 Coastal Bend Council of Governments 20,001-100,000 17,879 99.0 185 1.0 18,064 Coastal Bend Council of Governments 20,001-100,000 140,152 99.1 1,281 0.9 141,433 Concho Valley Council of Governments 1-5,000 21,278 98.6 301 1.4 21,579 Concho Valley Council of Governments 20,001-100,000 3,984 99.3 27 0.7 4,011 Concho Valley Council of Governments 1.5,000 30 30 <td></td> <td></td> <td>0</td> <td></td> <td>0</td> <td></td> <td>///////////////////////////////////////</td>			0		0		///////////////////////////////////////
Central Texas Council of Governments			22,995		556		
Central Texas Council of Governments		20,001-100,000		99.2	984	8.0	130,562
Central Texas Council of Governments 20,001-100,000 79,762 99.2 631 0.8 80,393 Coastal Bend Council of Governments 1-5,000 632 55.4 509 44.6 1,141 Coastal Bend Council of Governments 5,001-20,000 17,879 99.0 185 1.0 18,064 Coastal Bend Council of Governments 20,001-100,000 140,152 99.1 1,281 0.9 141,433 Concho Valley Council of Governments 1-5,000 21,278 98.6 301 1.4 21,579 Concho Valley Council of Governments 5,001-20,000 3,984 99.3 27 0.7 4,011 Concho Valley Council of Governments 1-5,000 39 99.3 27 0.7 4,011 Concho Valley Council of Governments 1-5,000 39 99.3 3.7 23,654 Deep East Texas Council of Governments 1-5,000 378,217 98.3 879 3.7 23,654 Deep East Texas Council of Governments 1-5,000 378,217 98.7 5,156	Central Texas Council of Governments	1-5,000	23,477	99.8	58		23,535
Coastal Bend Council of Governments	Central Texas Council of Governments	5,001-20,000	51,408	99.3	353	0.7	51,761
Coastal Bend Council of Governments 5,001-20,000 17,879 99.0 185 1.0 18,064 Coastal Bend Council of Governments 20,001-100,000 140,152 99.1 1,281 0.9 141,433 Concho Valley Council of Governments 1-5,000 21,278 98.6 301 1.4 21,579 Concho Valley Council of Governments 5,001-20,000 3,984 99.3 27 0.7 4,011 Concho Valley Council of Governments 20,001-100,000 30 99.3 27 0.7 4,011 Concho Valley Council of Governments 1-5,000 30 99.3 27 0.7 4,011 Deep East Texas Council of Governments 1-5,000 30 99.3 879 3.7 23,654 Deep East Texas Council of Governments 1-5,000 378,217 98.7 5,156 1.3 383,373 East Texas Council of Governments 1-5,000 82,525 99.3 556 0.7 83,081 East Texas Council of Governments 20,001-100,000 38,310 99.1	Central Texas Council of Governments	20,001-100,000	79,762	99.2	631		80,393
Coastal Bend Council of Governments 20,001-100,000 140,152 99.1 1,281 0.9 141,433 Concho Valley Council of Governments 1-5,000 21,278 98.6 301 1.4 21,579 Concho Valley Council of Governments 5,001-20,000 3,984 99.3 27 0.7 4,011 Concho Valley Council of Governments 20,001-100,000 3,984 99.3 27 0.7 4,011 Concho Valley Council of Governments 20,001-100,000 3,984 99.3 27 0.7 4,011 Deep East Texas Council of Governments 1-5,000 3,001 <t< td=""><td>Coastal Bend Council of Governments</td><td>1-5,000</td><td>632</td><td>55.4</td><td>509</td><td>44.6</td><td>1,141</td></t<>	Coastal Bend Council of Governments	1-5,000	632	55.4	509	44.6	1,141
Concho Valley Council of Governments 1-5,000 21,278 98.6 301 1.4 21,579 Concho Valley Council of Governments 5,001-20,000 3,984 99.3 27 0.7 4,011 Concho Valley Council of Governments 20,001-100,000 9	Coastal Bend Council of Governments	5,001-20,000	17,879	99.0	185	1.0	18,064
Concho Valley Council of Governments 5,001-20,000 3,984 99.3 27 0.7 4,011 Concho Valley Council of Governments 20,001-100,000 0	Coastal Bend Council of Governments	20,001-100,000	140,152	99.1	1,281	0.9	141,433
Concho Valley Council of Governments 20,001-100,000 6 8 Deep East Texas Council of Governments 1-5,000 9 9 3.7 23,654 Deep East Texas Council of Governments 5,001-20,000 378,217 98.7 5,156 1.3 383,373 East Texas Council of Governments 1-5,000 9 9 9 9 9 9 3.7 23,654 Deep East Texas Council of Governments 20,001-100,000 378,217 98.7 5,156 1.3 383,373	Concho Valley Council of Governments		21,278	98.6	301		21,579
Deep East Texas Council of Governments	Concho Valley Council of Governments	5,001-20,000	3,984	99.3	27	0.7	4,011
Deep East Texas Council of Governments	Concho Valley Council of Governments	20,001-100,000	/0		0		10
Deep East Texas Council of Governments 20,001-100,000 378,217 98.7 5,156 1.3 383,373	Deep East Texas Council of Governments	1-5,000	0		0		0
East Texas Council of Governments 1-5,000 \$6 \$83,081 East Texas Council of Governments 5,001-20,000 82,525 99.3 556 0.7 83,081 East Texas Council of Governments 20,001-100,000 180,258 99.1 1,647 0.9 181,905 Golden Crescent Regional Planning Com. 5,001-20,000 38,310 99.1 365 0.9 38,675 Golden Crescent Regional Planning Com. 20,001-100,000 59,392 98.8 733 1.2 60,125 Heart of Texas Council of Governments 1-5,000 99.4 340 0.6 59,652 Heart of Texas Council of Governments 20,001-100,000 37,961 98.4 634 1.6 38,595 Houston-Galveston Area Council 1-5,000 99.4 8,335 2.6 324,931 Houston-Galveston Area Council 5,001-20,000 11,166 95.5 522 4.5 11,688 Houston-Galveston Area Council 20,001-100,000 316,596 97.4 8,335 2.6 324,931 Middl	Deep East Texas Council of Governments	5,001-20,000	22,775	96.3	879	3.7	23,654
East Texas Council of Governments 5,001-20,000 82,525 99.3 556 0.7 83,081 East Texas Council of Governments 20,001-100,000 180,258 99.1 1,647 0.9 181,905 Golden Crescent Regional Planning Com. 1-5,000 38,310 99.1 365 0.9 38,675 Golden Crescent Regional Planning Com. 20,001-100,000 59,392 98.8 733 1.2 60,125 Heart of Texas Council of Governments 1-5,000 39,312 99.4 340 0.6 59,652 Heart of Texas Council of Governments 5,001-20,000 59,312 99.4 340 0.6 59,652 Heart of Texas Council of Governments 20,001-100,000 37,961 98.4 634 1.6 38,595 Houston-Galveston Area Council 1-5,000 37,961 98.4 634 1.6 38,595 Houston-Galveston Area Council 5,001-20,000 11,166 95.5 522 4.5 11,688 Houston-Galveston Area Council 20,001-100,000 316,596 <td< td=""><td>Deep East Texas Council of Governments</td><td>20,001-100,000</td><td>378,217</td><td>98.7</td><td>5,156</td><td>1.3</td><td>383,373</td></td<>	Deep East Texas Council of Governments	20,001-100,000	378,217	98.7	5,156	1.3	383,373
East Texas Council of Governments 20,001-100,000 180,258 99.1 1,647 0.9 181,905 Golden Crescent Regional Planning Com. 1-5,000 38,310 99.1 365 0.9 38,675 Golden Crescent Regional Planning Com. 5,001-20,000 38,310 99.1 365 0.9 38,675 Golden Crescent Regional Planning Com. 20,001-100,000 59,392 98.8 733 1.2 60,125 Heart of Texas Council of Governments 1-5,000 49 40 40 40 40 40 40 40 40 40 40 40 40 40	East Texas Council of Governments	1-5,000	100		0		0
Golden Crescent Regional Planning Com. 1-5,000 30	East Texas Council of Governments	5,001-20,000	82,525	99.3	556	0.7	83,081
Golden Crescent Regional Planning Com. 5,001-20,000 38,310 99.1 365 0.9 38,675 Golden Crescent Regional Planning Com. 20,001-100,000 59,392 98.8 733 1.2 60,125 Heart of Texas Council of Governments 1-5,000 99.4 340 0.6 59,652 Heart of Texas Council of Governments 20,001-100,000 37,961 98.4 634 1.6 38,595 Houston-Galveston Area Council 1-5,000 11,166 95.5 522 4.5 11,688 Houston-Galveston Area Council 5,001-20,000 11,166 95.5 522 4.5 11,688 Houston-Galveston Area Council 20,001-100,000 316,596 97.4 8,335 2.6 324,931 Middle Rio Grande Development Council 1-5,000 7,710 98.4 124 1.6 7,834 Middle Rio Grande Development Council 5,001-20,000 10,916 97.5 280 2.5 11,196 Middle Rio Grande Development Council 5,001-20,000 48,858 99.0 <t< td=""><td>East Texas Council of Governments</td><td>20,001-100,000</td><td>180,258</td><td>99.1</td><td>1,647</td><td>0.9</td><td>181,905</td></t<>	East Texas Council of Governments	20,001-100,000	180,258	99.1	1,647	0.9	181,905
Golden Crescent Regional Planning Com. 20,001-100,000 59,392 98.8 733 1.2 60,125	Golden Crescent Regional Planning Com.	1-5,000	0		0		0
Heart of Texas Council of Governments 1-5,000 60 59,652 Heart of Texas Council of Governments 5,001-20,000 59,312 99.4 340 0.6 59,652 Heart of Texas Council of Governments 20,001-100,000 37,961 98.4 634 1.6 38,595 Houston-Galveston Area Council 1-5,000 99.5 522 4.5 11,688 Houston-Galveston Area Council 5,001-20,000 11,166 95.5 522 4.5 11,688 Houston-Galveston Area Council 20,001-100,000 316,596 97.4 8,335 2.6 324,931 Middle Rio Grande Development Council 1-5,000 7,710 98.4 124 1.6 7,834 Middle Rio Grande Development Council 5,001-20,000 10,916 97.5 280 2.5 11,196 Middle Rio Grande Development Council 20,001-100,000 48,858 99.0 495 1.0 49,353 North Central Texas Council of Gov'ts 1-5,000 32,756 98.0 683 2.0 33,439	Golden Crescent Regional Planning Com.	5,001-20,000	38,310	99.1	365	0.9	38,675
Heart of Texas Council of Governments 1-5,000 60 59,652 Heart of Texas Council of Governments 5,001-20,000 59,312 99.4 340 0.6 59,652 Heart of Texas Council of Governments 20,001-100,000 37,961 98.4 634 1.6 38,595 Houston-Galveston Area Council 1-5,000 99.5 522 4.5 11,688 Houston-Galveston Area Council 5,001-20,000 11,166 95.5 522 4.5 11,688 Houston-Galveston Area Council 20,001-100,000 316,596 97.4 8,335 2.6 324,931 Middle Rio Grande Development Council 1-5,000 7,710 98.4 124 1.6 7,834 Middle Rio Grande Development Council 5,001-20,000 10,916 97.5 280 2.5 11,196 Middle Rio Grande Development Council 20,001-100,000 48,858 99.0 495 1.0 49,353 North Central Texas Council of Gov'ts 1-5,000 32,756 98.0 683 2.0 33,439	Golden Crescent Regional Planning Com.	20,001-100,000	59,392	98.8	733	1.2	60,125
Heart of Texas Council of Governments 20,001-100,000 37,961 98.4 634 1.6 38,595 Houston-Galveston Area Council 1-5,000 1,166 95.5 522 4.5 11,688 Houston-Galveston Area Council 20,001-100,000 316,596 97.4 8,335 2.6 324,931 Middle Rio Grande Development Council 1-5,000 7,710 98.4 124 1.6 7,834 Middle Rio Grande Development Council 5,001-20,000 10,916 97.5 280 2.5 11,196 Middle Rio Grande Development Council 20,001-100,000 48,858 99.0 495 1.0 49,353 North Central Texas Council of Gov'ts 1-5,000 32,756 98.0 683 2.0 33,439 North Central Texas Council of Gov'ts 20,001-100,000 1,084,092 99.3 8,014 0.7 1,092,106 North Texas Regional Planning Com. 1-5,000 10,500 93.8 698 6.2 11,198	Heart of Texas Council of Governments	1-5,000	0		0		<u> </u>
Houston-Galveston Area Council 1-5,000 60	Heart of Texas Council of Governments	5,001-20,000	59,312	99.4	340	0.6	59,652
Houston-Galveston Area Council 1-5,000 80	Heart of Texas Council of Governments			98.4			
Houston-Galveston Area Council 20,001-100,000 316,596 97.4 8,335 2.6 324,931 Middle Rio Grande Development Council 1-5,000 7,710 98.4 124 1.6 7,834 Middle Rio Grande Development Council 5,001-20,000 10,916 97.5 280 2.5 11,196 Middle Rio Grande Development Council 20,001-100,000 48,858 99.0 495 1.0 49,353 North Central Texas Council of Gov'ts 1-5,000 80 80 683 2.0 33,439 North Central Texas Council of Gov'ts 20,001-100,000 1,084,092 99.3 8,014 0.7 1,092,106 North Texas Regional Planning Com. 1-5,000 10,500 93.8 698 6.2 11,198	Houston-Galveston Area Council	1-5,000	10		0		Ø
Houston-Galveston Area Council 20,001-100,000 316,596 97.4 8,335 2.6 324,931 Middle Rio Grande Development Council 1-5,000 7,710 98.4 124 1.6 7,834 Middle Rio Grande Development Council 5,001-20,000 10,916 97.5 280 2.5 11,196 Middle Rio Grande Development Council 20,001-100,000 48,858 99.0 495 1.0 49,353 North Central Texas Council of Gov'ts 1-5,000 32,756 98.0 683 2.0 33,439 North Central Texas Council of Gov'ts 5,001-20,000 32,756 98.0 683 2.0 33,439 North Central Texas Council of Gov'ts 20,001-100,000 1,084,092 99.3 8,014 0.7 1,092,106 North Texas Regional Planning Com. 1-5,000 10,500 93.8 698 6.2 11,198	Houston-Galveston Area Council		11,166	95.5	522	4.5	11,688
Middle Rio Grande Development Council 1-5,000 7,710 98.4 124 1.6 7,834 Middle Rio Grande Development Council 5,001-20,000 10,916 97.5 280 2.5 11,196 Middle Rio Grande Development Council 20,001-100,000 48,858 99.0 495 1.0 49,353 North Central Texas Council of Gov'ts 1-5,000 32,756 98.0 683 2.0 33,439 North Central Texas Council of Gov'ts 20,001-100,000 1,084,092 99.3 8,014 0.7 1,092,106 North Texas Regional Planning Com. 1-5,000 10,500 93.8 698 6.2 11,198	Houston-Galveston Area Council	20,001-100,000	316,596	97.4	8,335	2.6	324,931
Middle Rio Grande Development Council 20,001-100,000 48,858 99.0 495 1.0 49,353 North Central Texas Council of Gov'ts 1-5,000 32,756 98.0 683 2.0 33,439 North Central Texas Council of Gov'ts 5,001-20,000 1,084,092 99.3 8,014 0.7 1,092,106 North Texas Regional Planning Com. 1-5,000 10,500 93.8 698 6.2 11,198	Middle Rio Grande Development Council	1-5,000	7,710	98.4		1.6	
Middle Rio Grande Development Council 20,001-100,000 48,858 99.0 495 1.0 49,353 North Central Texas Council of Gov'ts 1-5,000 32,756 98.0 683 2.0 33,439 North Central Texas Council of Gov'ts 5,001-20,000 1,084,092 99.3 8,014 0.7 1,092,106 North Texas Regional Planning Com. 1-5,000 10,500 93.8 698 6.2 11,198	Middle Rio Grande Development Council						11,196
North Central Texas Council of Gov'ts 1-5,000 8 North Central Texas Council of Gov'ts 5,001-20,000 32,756 98.0 683 2.0 33,439 North Central Texas Council of Gov'ts 20,001-100,000 1,084,092 99.3 8,014 0.7 1,092,106 North Texas Regional Planning Com. 1-5,000 10,500 93.8 698 6.2 11,198							
North Central Texas Council of Gov'ts 5,001-20,000 32,756 98.0 683 2.0 33,439 North Central Texas Council of Gov'ts 20,001-100,000 1,084,092 99.3 8,014 0.7 1,092,106 North Texas Regional Planning Com. 1-5,000 10,500 93.8 698 6.2 11,198	•						
North Central Texas Council of Gov'ts 20,001-100,000 1,084,092 99.3 8,014 0.7 1,092,106 North Texas Regional Planning Com. 1-5,000 10,500 93.8 698 6.2 11,198	North Central Texas Council of Gov'ts		32,756	98.0		2.0	33,439
North Texas Regional Planning Com. 1-5,000 10,500 93.8 698 6.2 11,198							
	• •	5,001-20,000	51,030	97.8	1,167	2.2	52,197

	Population	1999				
Regional Group	Category	Residential & Business Lines				es
		ILEC	%	CLEC	%	Total
North Texas Regional Planning Com.	20,001-100,000	00		/8		0
Panhandle Regional Planning Commission	1-5,000	17,464	71.5	6,953	28.5	24,417
Panhandle Regional Planning Commission	5,001-20,000	59,657	93.9	3,865	6.1	63,522
Panhandle Regional Planning Commission	20,001-100,000	39,321	96.3	1,494	3.7	40,815
Permian Basin Regional Planning Com.	1-5,000	7,759	93.6	534	6.4	8,293
Permian Basin Regional Planning Com.	5,001-20,000	45,454	97.4	1,234	2.6	46,688
Permian Basin Regional Planning Com.	20,001-100,000	15,243	94.8	828	5.2	16,071
Rio Grande Council of Governments	1-5,000	7,016	98.4	117	1.6	7,133
Rio Grande Council of Governments	5,001-20,000	285	75.8	91	24.2	376
Rio Grande Council of Governments	20,001-100,000	00		10		0
South Plains Association of Governments	1-5,000	3,874	97.1	117	2.9	3,991
South Plains Association of Governments	5,001-20,000	30,969	98.6	449	1.4	31,418
South Plains Association of Governments	20,001-100,000	31,774	96.2	1,256	3.8	33,030
South Texas Development Council	1-5,000	2,528	90.2	276	9.8	2,804
South Texas Development Council	5,001-20,000	10,226	95.5	487	4.5	10,713
South Texas Development Council	20,001-100,000	16,887	97.6	409	2.4	17,296
Texoma Council of Governments	1-5,000	00		0		0
Texoma Council of Governments	5,001-20,000	/0		9		10
Texoma Council of Governments	20,001-100,000	35,594	99.1	315	0.9	35,909
West Central Texas Council of Gov'ts	1-5,000	22,889	98.0	471	2.0	23,360
West Central Texas Council of Gov'ts	5,001-20,000	81,972	98.4	1,304	1.6	83,276
West Central Texas Council of Gov'ts	20,001-100,000	21,155	96.9	684	3.1	21,839

12,532,003 93.9 810,259 6.1 13,342,262

Source: Public Utility Commission

Table 37 – Comparison of 1998 ILEC and CLEC Revenues

	Population	1998				
Regional Group	Category	Residential & Business Revenue				
		ILEC	%	CLEC	%	Total
Large Metro (Group 1)	Over 600,000	1,140,090,685	95.3	56,098,286	4.7	1,196,188,971
Suburban (Group 2)	Near Metro	140,049,684	91.1	13,636,940	8.9	153,686,624
Small and Medium Metro (Group3)	Other Large	312,839,808	96.7	10,539,058	3.3	323,378,865
Alamo Area Council of Governments	1-5,000	100		0		0
Alamo Area Council of Governments	5,001-20,000	10,150,390	99.8	24,834	0.2	10,175,224
Alamo Area Council of Governments	20,001-100,000	36,694,154	99.8	68,016	0.2	36,762,170
Ark-Tex Council of Governments	1-5,000	139,141	99.8	266	0.2	139,407
Ark-Tex Council of Governments	5,001-20,000	5,342,550	100.0	0	0.0	5,342,550
Ark-Tex Council of Governments	20,001-100,000	16,043,924	99.9	16,077	0.1	16,060,001
Brazos Valley Council of Governments	1-5,000	8		100		0
Brazos Valley Council of Governments	5,001-20,000	4,084,422	99.3	29,729	0.7	4,114,151
Brazos Valley Council of Governments	20,001-100,000	3,273,953	98.6	46,811	1.4	3,320,764
Capital Area Planning Council	1-5,000	100		100		0
Capital Area Planning Council	5,001-20,000	2,461,242	100.0	777	0.0	2,462,019
Capital Area Planning Council	20,001-100,000	16,537,940	99.9	20,738	0.1	16,558,678
Central Texas Council of Governments	1-5,000	175,074	99.8	313	0.2	175,387
Central Texas Council of Governments	5,001-20,000	3,688,940	99.9	3,311	0.1	3,692,251
Central Texas Council of Governments	20,001-100,000	3,345,020	99.6	13,571	0.4	3,358,591
Coastal Bend Council of Governments	1-5,000	72,799	100.0	0	0.0	72,799
Coastal Bend Council of Governments	5,001-20,000	2,413,105	99.4	14,416	0.6	2,427,521
Coastal Bend Council of Governments	20,001-100,000	20,453,845	99.8	39,376	0.2	20,493,221
Concho Valley Council of Governments	1-5,000	2,347,822	99.5	11,963	0.5	2,359,785
Concho Valley Council of Governments	5,001-20,000	492,341	99.9	432	0.1	492,773
Concho Valley Council of Governments	20,001-100,000	8		/9		0
Deep East Texas Council of Governments	1-5,000	0		0		0
Deep East Texas Council of Governments	5,001-20,000	2,360,648	95.4	115,098	4.6	2,475,746
Deep East Texas Council of Governments	20,001-100,000	59,525,362	98.6	816,367	1.4	60,341,729
East Texas Council of Governments	1-5,000	(100		100
East Texas Council of Governments	5,001-20,000	7,339,735	100.0	1,835	0.0	7,341,570
East Texas Council of Governments	20,001-100,000	17,586,922	99.7	49,858	0.3	17,636,780
Golden Crescent Regional Planning Com.	1-5,000	0		10		0
Golden Crescent Regional Planning Com.	5,001-20,000	5,982,958	99.6	24,485	0.4	6,007,443
Golden Crescent Regional Planning Com.	20,001-100,000	10,022,442	99.6	39,569	0.4	10,062,011
Heart of Texas Council of Governments	1-5,000	0		0		100
Heart of Texas Council of Governments	5,001-20,000	8,727,865	99.8	17,654	0.2	8,745,519
Heart of Texas Council of Governments	20,001-100,000	4,280,287	92.2	362,684	7.8	4,642,971
Houston-Galveston Area Council	1-5,000	100		100		0
Houston-Galveston Area Council	5,001-20,000	1,745,908	98.8	20,551	1.2	1,766,459
Houston-Galveston Area Council	20,001-100,000	53,536,054	77.4	15,646,508	22.6	69,182,562
Middle Rio Grande Development Council	1-5,000	927,210	99.4	5,262	0.6	932,471
Middle Rio Grande Development Council	5,001-20,000		99.6	7,744	0.4	1,831,130
Middle Rio Grande Development Council	20,001-100,000		99.8	12,889	0.2	7,497,599
North Central Texas Council of Gov'ts	1-5,000			//////////////////////////////////////		(1)
North Central Texas Council of Gov'ts	5,001-20,000		99.0	4,651	1.0	472,448
North Central Texas Council of Gov'ts	20,001-100,000		99.7	537,406	0.3	185,632,485
North Texas Regional Planning Com.	1-5,000	1,104,402	98.9	12,002	1.1	1,116,404

l	Population			1998		
Regional Group	Category	Resi	Residential & Business Revenue			
		ILEC	%	CLEC	%	Total
North Texas Regional Planning Com.	5,001-20,000	7,396,129	95.5	345,013	4.5	7,741,142
North Texas Regional Planning Com.	20,001-100,000	0		10		0
Panhandle Regional Planning Commission	1-5,000	2,433,234	99.2	19,593	8.0	2,452,827
Panhandle Regional Planning Commission	5,001-20,000	8,822,532	98.1	174,631	1.9	8,997,163
Panhandle Regional Planning Commission	20,001-100,000	6,203,179	98.5	95,632	1.5	6,298,811
Permian Basin Regional Planning Com.	1-5,000	1,194,487	99.6	4,266	0.4	1,198,754
Permian Basin Regional Planning Com.	5,001-20,000	7,009,440	98.3	123,384	1.7	7,132,824
Permian Basin Regional Planning Com.	20,001-100,000	2,756,921	98.7	37,256	1.3	2,794,177
Rio Grande Council of Governments	1-5,000	726,415	100.0	302	0.0	726,717
Rio Grande Council of Governments	5,001-20,000	47,354	97.3	1,334	2.7	48,688
Rio Grande Council of Governments	20,001-100,000	0		9		/0
South Plains Association of Governments	1-5,000	527,681	99.9	762	0.1	528,443
South Plains Association of Governments	5,001-20,000	4,642,442	97.0	142,889	3.0	4,785,331
South Plains Association of Governments	20,001-100,000	4,476,652	97.8	101,288	2.2	4,577,940
South Texas Development Council	1-5,000	447,893	99.9	576	0.1	448,469
South Texas Development Council	5,001-20,000	1,396,606	99.8	2,633	0.2	1,399,239
South Texas Development Council	20,001-100,000	2,049,154	99.8	3,544	0.2	2,052,698
Texoma Council of Governments	1-5,000	0		0		/0
Texoma Council of Governments	5,001-20,000	(3)		0		0
Texoma Council of Governments	20,001-100,000	4,867,019	99.8	9,900	0.2	4,876,919
West Central Texas Council of Gov'ts	1-5,000	3,595,314	99.9	2,297	0.1	3,597,611
West Central Texas Council of Gov'ts	5,001-20,000	10,963,546	99.5	51,243	0.5	11,014,789
West Central Texas Council of Gov'ts	20,001-100,000	2,508,395	99.7	8,221	0.3	2,516,616

2,160,771,998 95.6 99,364,239 4.4 2,260,136,236

Table 38 – Comparison of 1999 ILEC and CLEC Revenues

Barrian at Grann	Population	1999					
Regional Group	Category	Residential & Business Revenue					
Large Mater (Occurs 4)	0	ILEC	%	CLEC	%	Total	
Large Metro (Group 1)	Over 600,000	1,187,016,172	88.3	156,742,378	11.7	1,343,758,549	
Suburban (Group 2)	Near Metros	149,507,742	84.6	27,280,185	15.4	176,787,927	
Small and Medium Metro (Group3)	Other Large	336,148,683	95.0	17,779,206	5.0	353,927,888	
Alamo Area Council of Governments	1-5,000						
Alamo Area Council of Governments	5,001-20,000	11,004,238	99.7	32,274	0.3	11,036,512	
Alamo Area Council of Governments	20,001-100,000	39,856,364	99.4	243,497	0.6	40,099,861	
Ark-Tex Council of Governments	1-5,000	147,933	85.9	24,382	14.1	172,315	
Ark-Tex Council of Governments	5,001-20,000	5,529,296	99.9	6,907	0.1	5,536,203	
Ark-Tex Council of Governments	20,001-100,000	16,798,931	99.6	72,839	0.4	16,871,770	
Brazos Valley Council of Governments	1-5,000	///////////////////////////////////////		0		<u> </u>	
Brazos Valley Council of Governments	5,001-20,000	4,481,279	98.8	54,569	1.2	4,535,848	
Brazos Valley Council of Governments	20,001-100,000	3,498,711	96.8	114,756	3.2	3,613,467	
Capital Area Planning Council	1-5,000	90		0		8	
Capital Area Planning Council	5,001-20,000	2,702,055	99.9	2,639	0.1	2,704,694	
Capital Area Planning Council	20,001-100,000	18,906,240	99.8	39,228	0.2	18,945,468	
Central Texas Council of Governments	1-5,000	188,130	96.4	6,953	3.6	195,083	
Central Texas Council of Governments	5,001-20,000	3,886,306	99.9	5,626	0.1	3,891,932	
Central Texas Council of Governments	20,001-100,000	3,646,921	99.1	32,229	0.9	3,679,150	
Coastal Bend Council of Governments	1-5,000	76,409	65.4	40,445	34.6	116,854	
Coastal Bend Council of Governments	5,001-20,000	2,494,211	98.7	32,354	1.3	2,526,565	
Coastal Bend Council of Governments	20,001-100,000	24,169,125	99.3	173,473	0.7	24,342,598	
Concho Valley Council of Governments	1-5,000	2,438,134	98.5	37,837	1.5	2,475,971	
Concho Valley Council of Governments	5,001-20,000	509,695	99.9	520	0.1	510,215	
Concho Valley Council of Governments	20,001-100,000			(1)		<u> </u>	
Deep East Texas Council of Governments	1-5,000	0		0		0	
Deep East Texas Council of Governments	5,001-20,000	2,623,498	93.7	175,910	6.3	2,799,408	
Deep East Texas Council of Governments	20,001-100,000	64,637,771	98.0	1,347,748	2.0	65,985,519	
East Texas Council of Governments	1-5,000	//////////////////////////////////////		(((((((((((((((((((((((((((((((((((((((
East Texas Council of Governments	5,001-20,000	7,637,866	99.7	25,227	0.3	7,663,093	
East Texas Council of Governments	20,001-100,000		97.8	420,928	2.2	19,317,080	
Golden Crescent Regional Planning Com.	1-5,000						
Golden Crescent Regional Planning Com.	5,001-20,000	6,501,545	99.3	47,881	0.7	6,549,426	
Golden Crescent Regional Planning Com.	20,001-100,000	10,679,028	99.5	49,139	0.5	10,728,167	
Heart of Texas Council of Governments	1-5,000		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
Heart of Texas Council of Governments	5,001-20,000		99.7	30,057	0.3	9,362,305	
Heart of Texas Council of Governments	20,001-100,000	, ,	91.0	487,740	9.0	5,395,683	
Houston-Galveston Area Council	1-5,000	1,001,010		101,110		0,000,000	
Houston-Galveston Area Council	5,001-20,000	1,890,412	99.1	17,125	0.9	1,907,536	
Houston-Galveston Area Council	20,001-100,000	58,366,721	76.7	17,773,325	23.3	76,140,046	
Middle Rio Grande Development Council	1-5,000	1,005,136	98.4	16,386	1.6	1,021,522	
Middle Rio Grande Development Council	5,001-20,000		98.7	24,976	1.3	1,966,235	
Middle Rio Grande Development Council	20,001-100,000		98.7	107,017	1.3	7,966,502	
North Central Texas Council of Gov'ts	1-5,000	1,039,404	90.1	107,017	1.3	7,900,302	
North Central Texas Council of Gov'ts	5,001-20,000	576,771	97.0	17 677	<i>/////////////////////////////////////</i>	594,448	
North Central Texas Council of Gov'ts	20,001-20,000	199,114,966	99.5	17,677 966,023	0.5	200,080,990	
North Texas Regional Planning Com.	1-5,000		96.1	47,422	3.9		
	· · · · · · · · · · · · · · · · · · ·	1,153,738				1,201,160	
North Texas Regional Planning Com.	5,001-20,000	8,014,638	92.0	692,698	8.0	8,707,336	

l	Population	1999						
Regional Group	Category	Residential & Business Revenue						
		ILEC	%	CLEC	%	Total		
North Texas Regional Planning Com.	20,001-100,000	100		0		00		
Panhandle Regional Planning Commission	1-5,000	2,490,847	94.9	132,773	5.1	2,623,620		
Panhandle Regional Planning Commission	5,001-20,000	9,190,907	94.6	523,133	5.4	9,714,040		
Panhandle Regional Planning Commission	20,001-100,000	7,077,551	94.9	380,662	5.1	7,458,212		
Permian Basin Regional Planning Com.	1-5,000	1,298,189	99.0	12,763	1.0	1,310,952		
Permian Basin Regional Planning Com.	5,001-20,000	7,354,664	97.9	158,446	2.1	7,513,110		
Permian Basin Regional Planning Com.	20,001-100,000	2,905,050	94.8	160,565	5.2	3,065,615		
Rio Grande Council of Governments	1-5,000	786,877	99.1	7,214	0.9	794,092		
Rio Grande Council of Governments	5,001-20,000	48,825	88.5	6,320	11.5	55,145		
Rio Grande Council of Governments	20,001-100,000	0		/0		9		
South Plains Association of Governments	1-5,000	560,331	98.7	7,416	1.3	567,747		
South Plains Association of Governments	5,001-20,000	4,951,372	94.4	292,095	5.6	5,243,467		
South Plains Association of Governments	20,001-100,000	4,774,550	93.7	320,341	6.3	5,094,891		
South Texas Development Council	1-5,000	466,467	98.3	8,167	1.7	474,634		
South Texas Development Council	5,001-20,000	1,488,720	99.0	15,510	1.0	1,504,230		
South Texas Development Council	20,001-100,000	2,104,456	95.4	100,478	4.6	2,204,934		
Texoma Council of Governments	1-5,000	\(\)		/0		9		
Texoma Council of Governments	5,001-20,000	100		0		/0		
Texoma Council of Governments	20,001-100,000	5,359,373	99.4	31,050	0.6	5,390,423		
West Central Texas Council of Gov'ts	1-5,000	3,824,581	99.6	17,248	0.4	3,841,829		
West Central Texas Council of Gov'ts	5,001-20,000	11,812,837	98.6	170,419	1.4	11,983,256		
West Central Texas Council of Gov'ts	20,001-100,000	2,646,302	99.5	12,491	0.5	2,658,793		

2,287,287,649 91.0 227,326,666 9.0 2,514,614,315

Source: Public Utility Commission

APPENDIX K: THE SWBT MEGA-ARBITRATION

ORIGINAL SOUTHWESTERN BELL TELEPHONE (SWBT) ARBITRATIONS: PUC DOCKET NOS. 16189, 16196, 16226, 16285 AND 16290. 123

In 1996, pursuant to the FTA, five would-be competitors filed for arbitration of interconnection issues with SWBT. To facilitate administration, the Commission consolidated the petitions of these companies into one proceeding, informally termed the "SWBT mega-arbitration." In two different phases of hearings held in 1996 and 1997, the Commission heard testimony on issues that included performance standards, terms and conditions of reselling services and purchasing unbundled network elements (UNEs), services and elements that are subject to wholesale, reciprocal compensation, discounts for resold services, and prices for UNEs. The Commission issued its final awards in the mega-arbitration on September 30 and December 19, 1997; it also issued later clarifications of the awards. Some of the major issues decided in the SWBT mega-arbitration are as follows:

The use of Total Element Long Run Incremental Cost (TELRIC) is the appropriate methodology for pricing UNEs.

In its August 1996 local-competition rules, the Federal Communications Commission (FCC) decreed that state commissions should set UNE prices equal to the sum of the UNE's TELRIC and a "reasonable" share of forward-looking common costs. Accordingly, the PUC adopted this methodology. In July 1997, however, the 8th Circuit Court of Appeals, in *Iowa Utilities Board*, ¹²⁴ ruled that states are able to choose their own pricing methodology, rather than be required to use the TELRIC methodology mandated by the FCC. Nevertheless, this ruling had no effect on the PUC's pricing methodology, because the PUC had developed an independent justification of the TELRIC methodology. The Commission determined that when retail-related costs such as advertising and billing were not considered, the total forward-looking economic costs

Loops, Docket No. 16189 (Feb. 27, 1998); Petition of Teleport Communications Group, Inc., for Arbitration to Establish an Interconnection Agreement, Docket No. 16196, (Feb. 27, 1998); Petition of AT&T Communications of the Southwest, Inc. for Compulsory Arbitration to Establish an Interconnection Agreement Between AT&T and Southwestern Bell Telephone Company, Docket No. 16226, (Feb. 27, 1998); Petition of MCI Telecommunication Corporation and Its Affiliate MCI Metro Access Transmission Services, Inc. for Arbitration and Request for Mediation Under the Federal Telecommunications Act of 1996, Docket No. 16285, (Feb. 27, 1998); Petition of American Communications Services, Inc. and Its Local Exchange Operating Subsidiaries for Arbitration with SWBT Pursuant to the Telecommunications Act of 1996, Docket No. 16290 (Feb. 27, 1998).

¹²⁴ *Iowa Utilities Board v. FCC*, 109 F.3d 418 (8th Cir. 1996). (In 1999 the U.S. Supreme Court upheld this ruling in *AT&T Corp. v. Iowa Utilities Board*, 525 U.S. 366, 371-372, 119 S. Ct. 721, 726-27 (1999)).

recovered by a company with prices equal to TELRIC plus an allocation of economic common costs would be equal to the total forward-looking economic costs recovered by a company with prices equal to the total service long run incremental cost (TSLRIC) plus an allocation of economic common costs. Because the Commission has a cost rule that provides guidelines for calculating TSLRIC and forward-looking common costs, and this standard is referred to multiple times in PURA, the Commission determined that it would be appropriate to mandate the use of TELRIC in calculating prices for UNEs. The Commission used this reasoning to set permanent TELRIC-based prices in the second Phase of the SWBT mega-arbitration.

The loop UNE should be further unbundled into distribution and feeder portions.

Believing that it would be economically prudent and competitively beneficial to allow subloop unbundling, the Commission exercised the option given by the FCC to further unbundle the loop element into feeder and distribution portions. Specifically, the Commission required SWBT to offer as unbundled elements (1) in the distribution segment, the loop segment extending between a remote-terminal site and the end-user's premises; (2) in the feeder segment, only the dark fiber and the 4-wire copper cable conditioned for DS-1 service; and (3) the digital loop carrier (a device for multiplexing, or combining, communication channels).

SWBT should perform the work necessary to connect combinations of UNEs ordered by competitive carriers, and should be compensated for this work.

The Commission held SWBT to its voluntary commitment to combine UNEs in lieu of providing competitors direct access to its network, and set rates that allowed SWBT to recover the forward-looking economic cost of performing the work for the CLECs.

SWBT must offer all retail services for resale at a 21.6% avoided cost discount.

The Commission determined that if SWBT were to provide service on a wholesale basis only, it would avoid an average of 21.6% of its current costs. In addition, the Commission determined that this discount should apply to all retail telecommunications service offerings, except promotional offerings of 90 days or less.

Each local service provider, including SWBT, should absorb its own costs of providing interim number portability (INP).

The Commission determined that few customers would be willing to change local-service providers without INP. The Commission also recognized that all facilities-based local service providers would have to incur (or already had incurred) costs related to implementing INP.

Later, the FCC decreed that all ILECs serving in the nation's 100 largest metropolitan statistical areas must implement permanent local number portability (LNP). Such implementation occurred in five phases, ending December 31, 1998. ILECs serving smaller communities are required to provide LNP if they receive a bona fide request. ILECs are allowed to recover their LNP implementation costs by assessing a monthly flat

fee on all of their access lines, for a period not to exceed five years. SWBT's monthly fee is \$.33 per line.

SWBT must provide real-time electronic interfaces for operation support system (OSS) functions.

The Commission determined that to level the competitive playing field, competitors need access to the same types of electronic billing, ordering, and provisioning systems that SWBT uses for itself in interactions with its own customers on a real-time basis at parity with SWBT's access. Making such systems available to competitors was extraordinarily controversial because it required modifications to SWBT's systems to handle orders from outside parties using different computer applications. SWBT worked with the petitioners to develop new systems and modify existing ones to give CLECs billing, ordering, and provisioning parity with SWBT. Rates, terms, conditions, and implementation schedules were set for certain functions, weighing forward-looking economic concerns with the difficulties of designing the necessary systems.

To win approval of its 271 application, SWBT had to demonstrate to the Commission and the FCC that its fully electronic OSS could properly handle commercial volumes of service orders of various types from different providers. Even now, SWBT's OSS continues to be monitored and modified, in response to input from the Commission staff and competitors. Penalties are imposed on SWBT if it fails to meet OSS-related performance measures; it also is required to upgrade its OSS software as new technological enhancements are developed and industry standards change.

CLECs requesting an electronic interface with SWBT are subject to a monthly charge, but SWBT agreed to waive this charge for three years as a condition of its 1999 merger with Ameritech. CLECs still pay a fee for each service order placed using SWBT's OSS.

The company using the switch port is entitled to all toll revenue associated with that switch port.

The Commission determined that when a competitive provider purchases a switch port from SWBT, the competitor is entitled to all access revenues associated with the UNEs purchased, along with toll revenues.

CLECs who opt into another CLEC's agreement with SWBT can, on a limited basis, "pick and choose" provisions to opt into.

Most favored nation (MFN) provisions allow a CLEC to choose to place parts of an agreement another CLEC may have made with SWBT into its own agreement with SWBT. Although the FCC interpreted such provisions as allowing a CLEC to select small bits and pieces from other contracts, the U.S. EIGHTH Circuit Court of Appeals rejected this interpretation in 1997. In the Commission's mega-arbitration negotiations, however, SWBT offered to allow a CLEC to opt into another CLEC's contract with SWBT so long as it opted into large sections of the contract, rather than only individual rates, terms, or conditions. The Commission incorporated this provision into its order, and in 1998 applied this principle in the SWBT vs. Waller Creek arbitration. In 1999 the

U.S. Supreme Court partially reversed the Eighth Circuit's 1997 order, ruling that an ILEC can only require a CLEC to accept those terms in an existing agreement that are "legitimately related" to the desired provision. In August of 2000, the U.S. Fifth Circuit Court of Appeals upheld the Commission's "pick and choose" policy, ruling that the SWBT vs. Waller Creek arbitration award was consistent with the interpretation enunciated by the U.S. Supreme Court. 125

¹²⁵ Southwestern Bell Telephone Company v. Waller Creek Communications, Inc.; Public Utility Commission of Texas, No. 99-50752, 2000 U.S. App. (5th Cir., August 21, 2000); AT&T Corp. v. Iowa Utilities Board, 525 U.S. 366, 371-372, 119 S. Ct. 721, 726-27 (1999).

APPENDIX L: PROCEEDINGS TO IMPLEMENT 1999 TEXAS LEGISLATION

Commission Proceedings to implement telecommunications legislation passed by the Texas Legislature in 1999 include the proceedings listed below.

Texas Universal Service Fund

Project No. 21162: Project to Establish Procedures for Providing USF Support for Schools Pursuant to PURA §56.028

Adopted 9/23/99. The purpose of this project was to establish an interim procedure for small and rural incumbent local exchange companies (SRILECs) to receive Texas Universal Service Funds (TUSF) pursuant to PURA § 56.028, relating to universal service fund reimbursements for certain IntraLATA service. The SRILECs were able to receive funds through a permanent mechanism implemented upon adoption of P.U.C. SUBST. R. § 26.410 in Project No. 21163.

Project No. 21163: Rulemaking to Amend the Texas Universal Service Fund Rules to Comply with SB 560 pursuant to PURA, §§ 56.021, 56.023, 56.024, 56.026, 56.028, and 56.072

Adopted 4/27/00. The purpose of this project was to amend the Texas Universal Service Fund (TUSF) rules to comply with SB 560. The Commission adopted amendments to P.U.C. SUBST. R. §§ 26.401, 26.403, 26.404, 26.413, 26.414, 26.415, 26.417, and 26.418, and added new § 26.410 relating to the TUSF. These revisions affect all telecommunications carriers that receive TUSF support. The revisions include adding the method used to determine support allocation when unbundled network elements (UNEs) are used to provision service, clarify discounts that are applied to certain services, and establish the circumstances in which an eligible telecommunications provider (ETP) designation can be relinquished.

Affiliate Issues

Project No. 21164: Rulemaking to Address Affiliate Issues for Telecommunications Service Providers Pursuant to PURA §§54.102, 60.164, and 60.165

Adopted 8/24/00. This project addressed the structural and transactional requirements for a holder of a CCN and its affiliated telecommunications service providers applying for or

Request for information and comments (9/8/99) and Order Establishing Interim Procedures for the Disbursement of Texas Universal Service Funds Pursuant to PURA §56.028 (10/4/99).

holding a COA or SPCOA. Staff published initial questions and received comments on January 18, 2000. A public workshop was held January 23, 2000 on staff's proposed strawman rule. Parties filed post-workshop comments on March 3, 2000. After evaluating the parties' comments, staff decided to merge this project with Project No. 21165 and consider all affiliate matters concurrently. Staff issued revised questions on June 9, 2000.

Conformance Rule Review

Project No. 21160: Rulemaking to Address PURA Chapter 59 Withdrawal of Election and Switched Access Rates; PURA, Sections 59.021, 59.024, and 59.025; [Merged with] Project No. 21169: Review of Substantive Rules to Conform to SB 560

Approved 9/7/00 (§26.5) and 11/1/00 (§26.274). The purpose of Project No. 21169 was to make minor conforming changes to P.U.C. Substantive Rules that, although affected by the changes to PURA created with SB 560, were not sufficiently affected as to require the initiation of separate rulemaking projects. Project No. 21160 was merged with Project No. 21169.

Publication of the first of two sets of proposed rule changes was delayed to coordinate with the publication of several rules relating to Chapter 58, Incentive Regulation. The first set, containing additions and modifications to P.U.C. SUBST. R. § 26.5, Definitions, was adopted in September 2000. The second set, containing minor conforming changes to P.U.C. SUBST. R. §26.274, Imputation, was adopted in November, 2000.

Workforce Diversity

Project No. 21170: Compliance Proceeding for Utilities' 5-Year Plans to Enhance Workforce Diversity; PURA, § 52.256

Filings received 1/1/00. This project established a mechanism for telecommunications utilities to file workforce diversity plans as established in SB 560.

Project No. 22166: Rulemaking to Establish Procedures for Telecommunication Utilities' Annual Report of Workforce Diversity

Adopted 6/29/00. The purpose of this project was to establish procedures for telecommunications utilities to comply with the new reporting requirement regarding workforce diversity.

Dark Fiber

Project No. 21171: Rulemaking to Address Municipalities or Certain Municipal Electric Systems Leasing Excess Capacity of Fiber Optic Cable Facilities; PURA § 54.2025

Closed July 17, 2000. This project addressed PURA § 54.2025, which provides that a municipality, or certain municipal electric systems may lease excess capacity of fiber optic cable facilities (dark fiber), so long as it is done on a nondiscriminatory, nonpreferential basis. A rule was not necessary at the time. Disputes are handled on a case-by-case basis.

CLEC Access Charges

Project No. 21174: Rulemaking to Address COA/SPCOA Switched Access Rates; PURA § 52.155

Adopted 6/29/00. The purpose of this project was to address COA/SPCOA switched access rates. The project established procedures for the Commission's review of switched access rates in excess of the rates charged by the territory's CCN holder.

Telecom Bill Simplification

Project No. 22130: Rulemaking to Implement PURA § 55.012, Relating to Telecommunications Bill Format

Adopted 7/26/00. This project, which was split off from Project No. 21423, Telephone Customer Protection Standards, revised P.U.C. SUBST. R.. § 26.25, Issuance and Format of Bills, to implement PURA § 55.012. The new PURA provision calls for LECs to issue simplified, easy-to-understand bills for local exchange telephone service.

New P.U.C. SUBST. R. § 26.25, which replaces the previous version of P.U.C. SUBST. R.. § 26.25, requires certificated telecommunications utilities (telecommunication utilities holding a CCN, COA, or SPCOA) to comply with minimum bill information and format guidelines, and to clarify information disseminated to residential customers in order to reduce complaints of slamming and cramming. New P.U.C. SUBST. R.. § 26.25 implements these requirements pursuant to the mandates set forth in the PURA, most particularly in § 55.012, Telecommunications Billing, but also in PURA § 17.003(c) and § 17.004(a)(8), and in the FCC's Truth-in-Billing rules (47 C.F.R. § 64.2000 and § 64.2001 (1999)). PURA § 55.012, Telecommunications Billing, called on LECs to issue simplified, easily understood bills for local service. PURA § 55.012(c) stated that to the extent allowed by law, such bills are to include aggregate charges for each of the following: (1) basic local service, (2) optional services, and (3) taxes.

The new rule was intended to decrease confusion associated with the proliferation of charges on residential customers' telephone bills for separate services and products and of related surcharges, fees, and taxes. However, the Commission may revisit billing issues that continue to be an area of concern.

Matters of significant importance included the following:

- Whether the rule should apply in its entirety to all CTUs, or just all LECs (which by PURA definition include holders of a CCN or a COA, but not holders of an SPCOA). The adopted rule applies to all certificated telecommunications utilities.
- Exactly what information should be required to appear on the first page of a residential customer's bill. This was the biggest area of interest; the adopted rule is considerably less prescriptive in this regard than was the version published for comment. The adopted rule requires only that the first page include the grand total due for all services billed, the payment due date, and a notification of any change in service provider. Also, CLECS took the position that differentiation in a competitive market is one standard for choosing formatting for bills.

- What the required compliance date should be for implementing the mandated changes. The adopted rule requires compliance within six months of the effective date, meaning February 15, 2001.
- Whether certificated telecommunications utilities could issue bills solely over the Internet. The adopted rule requires that a residential customer receive his/her bill via the United States mail, "unless the customer agrees with the utility to receive a bill through different means, such as electronically via the Internet." As explained in the rule preamble, this language allows the holder of an SPCOA, but not a holder of a CCN or a COA, from promoting itself as a company that bills over the Internet only.
- Whether surcharges imposed on a percentage-of-revenue basis could be included only in the basic local subtotal, or would have to be prorated between basic local service and optional services. The adopted rule permits the certificated telecommunications utility either to include the portion of such surcharges related to local service in the basic local subtotal or to allocate that portion between basic local service and optional local services on a proportionate basis.
- Whether to require the itemization (in dollars and cents) of surcharges included in the subtotals for basic local service and optional services. The adopted rule allows the certificated telecommunications utility discretion on this matter; however, if the specific amount of each assessment is not shown on the bill, the utility must clearly indicate on the bill a toll-free method, including a toll-free number, by which the customer may obtain information regarding the amount and method of calculation of each surcharge.
- Whether to require a specific statement on the bill of the amount the customer must pay to avoid having his/her basic local service disconnected. The adopted rule does not require such a statement; instead, it requires the certificated telecommunications utility to clearly and conspicuously identify on the bill those charges for which non-payment will not result in disconnection of basic local service, or to clearly and conspicuously identify on the bill those charges for which non-payment will result in disconnection of basic local service. As noted in the preamble, a specific statement of the amount the customer must pay to avoid disconnection will suffice for this purpose; it is also required by P.U.C. SUBST. R. 26.28 to be included in any disconnection notice sent to a residential customer.

IXC Flow Through of Reduced Access Charges

Project No. 21172: Declaratory Order to address interexchange carriers' access charge reduction pass-through filings.

Adopted 9/7/99. In this proceeding, the Commission established Sworn Affidavits of Completion as the mechanism for interexchange carriers to fulfill the requirements of PURA §52.112, which relates to rate reduction pass-through requirements. The specific minute of use data submitted and sworn to in the affidavits is considered highly confidential information by IXCs. A Declaratory Order was issued in September 1999 covering USF Docket Nos. 18515 and 18516, and PURA § 58.301, which relates to switched access rate reduction.

Project No. 21173: Compliance project to address interexchange carriers access charge reduction pass-through filings.

Adopted 6/29/00. In this proceeding initial access pass-through filings were submitted by AT&T, Worldcom, and Sprint (March 1, 2000) covering access reductions for the period beginning September 1, 1999. Supplemental filings of additional information were submitted in April of 2000. A review of information submitted by AT&T, Worldcom, and Sprint indicates reductions to Basic Rate Schedules as high as \$0.05 per minute were made for in-state long distance calls. Additionally, the affidavits indicated that residential subscribers received their proportionate share of switched access reductions in compliance with the requirements of PURA.

SWB Access Charge Reductions

Project No. 21184: Southwestern Bell Telephone Company notice of intent to file amended tariff sheets to implement reductions in its switched access service tariff in compliance with SB 560.

Adopted 9/1/99. PURA § 58.301(1) states that, effective September 1, 1999, an electing company with greater than five million access lines in the state shall reduce its switched access rates on a combined originating and terminating basis by one cent a minute. In this proceeding SWBT proposed implementing the one-cent reduction required by Section 58.301(1) by eliminating the one-cent Originating Residual Interconnection Charge remaining after the Second Interim Order in Docket No. 18515. The commission approved the application after consideration of the comments from all of the parties involved in the proceeding.

Project No. 22302: Application of Southwestern Bell Telephone company for approval of switched access service rate reduction pursuant to PURA §58.301(2)

Adopted 7/6/00. PURA § 58.301(2) states that, by no later than July 1, 2000 an electing company with greater than five million access lines in the state shall reduce its switched access rates on a combined originating and terminating basis by two cents a minute. In this proceeding, SWBT proposed implementing the one-cent reduction required by § 58.301(2) by reducing the Terminating Carrier Common Line Charge by two cents. The commission approved the application after an analysis of prior access reductions and no protest from the parties involved in the proceeding.

Project No. 21158: Compliance Project to Implement Switched Access Rates Reductions; PURA § 58.301

Initiated 7/27/99. This project was established for the reductions described in the above projects. This project was not used. The 1 cent reduction was implemented under Project No. 21184, and the 2 cent reduction was implemented in Project No. 22302.

Chapters 52, 58 & 59: Pricing Flexibility

At the September 7, 2000 open meeting, the commission adopted seven new rules that implement provisions of SB 560. Additionally, the commission repealed two existing rules made obsolete by adoption of the new rules.

There are two significant areas of importance in these rules. First, P.U.C. SUBST. R. §§ 26.225, 26.226, 26.227, and 26.229 were proposed with an anticompetitive standard in the form of a rebuttable presumption that placed the burden of proof upon an electing company to

show that the price of a service or package of services is not anticompetitive. ¹²⁷ The commission concluded that an anticompetitive standard is more appropriately developed on a case-by-case basis because a single rebuttable presumption may not adequately address the range of anticompetitive behaviors over which the commission has jurisdiction pursuant to PURA. The commission, therefore, deleted the rebuttable presumption from the adopted versions of the rules. However, the commission required incumbent LECs to furnish information, in their informational filing packages, about the relevant TELRIC-based wholesale prices and the retail prices for the service or package being offered. An interested party may rely on this information to initiate a complaint regarding anticompetitive pricing by an incumbent LEC.

Second, P.U.C. SUBST. R. §§ 26.226, 26.227, 26.228 and 26.229 were adopted by the commission with provisions that establish standards regarding the packaging and joint marketing of regulated services with unregulated products or services and/or with the products or services of an electing company's affiliate. Upon adoption, the provisions were expanded to obtain greater assurance regarding potential anticompetitive practices related to packaging and joint marketing.

Project No. 21155: Requirements Applicable to Pricing Flexibility for Chapter 58 Electing Companies

Adopted 9/7/00. New P.U.C. SUBST. R. § 26.226, *Requirements Applicable to Pricing Flexibility for Chapter 58 Electing Companies*, set forth the substantive requirements related to pricing flexibility. The rule affects Chapter 58 electing companies. Through the adoption of the rule, the commission made its rules consistent with PURA and clarified standards required of Chapter 58 electing companies for exercising pricing flexibility.

Repealed 9/7/00. P.U.C. SUBST. R. § 26.212, *Procedures Applicable to Chapter 58 Electing Incumbent Local Exchange Companies* and P.U.C. SUBSTANTIVE R. § 26.213, *Telecommunications Pricing*, were repealed. These rules were no longer necessary because of changes mandated by SB 560 and P.U.C. SUBST. R. §§ 26.224, 26.225, 26.226, and 26.227.

Project No. 21156: Requirements Applicable to Basic Network Services for Chapter 58 Electing Companies

Adopted 9/7/00. New P.U.C. SUBST. R. § 26.224, Requirements Applicable to Basic Network Services for Chapter 58 Electing Companies, set forth the procedural and substantive requirements for changing the rates of basic network services. The rule affects Chapter 58 electing companies. Through the adoption of P.U.C. SUBST. R. § 26.224, the commission made its rules consistent with PURA regarding the realignment from three types of services to two (basic and non-basic), and clarified the standards and procedures required of Chapter 58 electing companies for offering basic network services to customers.

Project No. 21157; Requirements Applicable to Nonbasic Services for Chapter 58 Electing Companies,

Adopted 9/7/00. New P.U.C. SUBST. R. § 26.225, Requirements Applicable to Nonbasic Services for Chapter 58 Electing Companies, established the substantive requirements relating to nonbasic services, including new services. The rule affects Chapter 58 electing companies. Through the adoption of the rule, the commission made its rules consistent with PURA and

¹²⁷ Specifically, the rebuttable presumption stated that the price of a service or package of services is anticompetitive if it is lower than the sum of the total element long run incremental cost (TELRIC)-based wholesale prices of components needed to provide the service or package.

clarified the standards required of Chapter 58 electing companies for offering nonbasic services to customers.

Project No. 21159: Long Run Incremental Cost (LRIC) Methodology for Services provided by Certain Incumbent Local Exchange Carriers (ILECs)

Adopted 9/7/00. New P.U.C. SUBST. R. § 26.214, Long Run Incremental Cost (LRIC) Methodology for Services provided by Certain Incumbent Local Exchange Carriers (ILECs), set forth the substantive and procedural requirements for LRIC studies filed by Chapter 52 companies and Chapter 59 electing companies. Through adoption of the rule, the commission made its rules consistent with PURA and clarified the standards required of Chapter 52 companies and Chapter 59 electing companies for submitting LRIC studies to the commission.

Project No. 21159: Requirements Applicable to Chapter 52 Companies

Adopted 9/7/00. New P.U.C. SUBST. R. § 26.228, *Requirements Applicable to Chapter 52 Companies*, set forth the substantive and procedural requirements regarding new services, pricing and packaging flexibility, customer promotional offerings, and customer specific contracts. The rule affects companies regulated under PURA, Chapter 52. Through adoption of the rule, the commission made its rules consistent with PURA and clarified the standards and procedures applicable to companies regulated under PURA, Chapter 52.

Project No. 21159: Requirements Applicable to Chapter 59 Electing Companies

Adopted 9/7/00. New P.U.C. SUBST. R. § 26.229, *Requirements Applicable to Chapter 59 Electing Companies*, set forth the substantive and procedural requirements regarding new services, pricing and packaging flexibility, customer promotional offerings, and customer specific contracts. The rule affects companies that elect to be regulated under PURA, Chapter 59. Through adoption of the rule, the commission made its rules consistent with PURA and clarified the standards and procedures applicable to companies that elect to be regulated under PURA, Chapter 59 for exercising flexibility and offering new services.

Project No. 21161: Procedures Applicable to Nonbasic Services and Pricing Flexibility for Basic and Nonbasic Services for Chapter 58 Electing Companies

Adopted 9/7/00. New P.U.C. SUBST. R. § 26.227, Procedures Applicable to Nonbasic Services and Pricing Flexibility for Basic and Nonbasic Services for Chapter 58 Electing Companies, set forth the procedural requirements for nonbasic services and pricing flexibility. The rule affects Chapter 58 electing companies. Through adoption of the rule, the commission implemented a procedure necessary to allow for an efficient and timely review of service offerings and established a complaint process contemplated by SB 560 in connection with information notice filings.

Municipal Franchise

Project No. 20935: Rulemakings to Implement the Provisions of HB 1777 or Section 283 of the Local Government Code

P.U.C. Subst. R. § 26.461, Relating to Access Line Categories

Adopted 10/21/99. New P.U.C. SUBST. R. § 26.461 applies to certificated telecommunication providers (CTPs) (defined as persons with a certificate of convenience and necessity, certificate of operation authority, or service provider certificate of operating authority

to offer local exchange telephone service) and to municipalities in the State of Texas. HB 1777 required the Commission to establish no more than three categories of access lines. This section establishes three competitively neutral, non-discriminatory categories of access lines for statewide use in establishing a uniform method for compensating municipalities for the use of a public right-of-way by CTPs. CTPs urged the Commission to establish not more than one category for administrative simplicity. Municipalities, on the other hand, unanimously requested the Commission to establish three categories. The Commission adopted three categories as it would offer Texas cities maximum flexibility to design municipal rates for their citizens. The three categories would also allow cities to establish lower rates for residential users compared to business customers.

P.U.C. Subst. R. § 26.463, Relating to Calculation and Reporting of a Municipality's Base amount

Adopted 10/21/99. New P.U.C. SUBST. R. § 26.463 establishes a uniform method for determining a municipality's base amount and for calculating the value of in-kind services provided to a municipality under an effective franchise agreement or ordinance by CTPs, and sets forth relevant reporting requirements. It applies to all municipalities in the State of Texas.

The cities and the CTPs were divided in their opinion over whether the accounting methodology used to calculate the 1998 base amount should be based on a calendar year or fiscal year. There were also significant disagreements on whether to use cash or revenue based accounting methods to calculate the 1998 base amount. Several cities also argued that the escalation provisions under HB 1777 were perpetual and that the base amount would have to be adjusted every year by the amount of escalation provisions in terminated contracts. The commission adopted rules to require cities to use calendar year 1998 as the base year for calculating the 1998 base amount. However, the commission rules gave the cities the flexibility to use revenues "due" for year 1998 to calculate the base amount for that year.

The Commission disagreed with the cities that the escalation provisions were perpetual. The adopted rules allowed escalation only until March, 2000 – the date by which rates had to be established by the Commission. The Commission concluded that escalation provisions in terminated contracts do not carry over beyond March, 2000. Further, the Commission noted that there is no mention in the statute about revising the base amount by escalation every year.

P.U.C. Subst. R. § 26.465, Relating to Methodology for Counting Access Lines and Reporting Requirements for Certificated Telecommunication Providers

Adopted 1/7/00. New P.U.C. SUBST. R. § 26.465 establishes a uniform method for counting access lines within a municipality by category as provided by §26.461 (relating to Access Line Categories), sets forth relevant reporting requirements, and sets forth certain reseller obligations under the Local Government Code, Chapter 283. The provisions apply to CTPs in the State of Texas.

CTPs and Cities had several disagreements over the line counting methodology. The commission adopted rules to require CTPs to count one access line for every end user in a manner consistent with the definition of access lines in HB 1777.

P.U.C. Subst. R. § 26.467, relating to Rates, Allocation, Compensation, Adjustments and Reporting

Adopted 5/1/00. New P.U.C. SUBST. R. § 26.467 establishes the following:

(1) rates for categories of access lines;

- (2) default allocation for municipalities;
- (3) adjustments to the base amount and allocation;
- (4) municipal compensation; and
- (5) associated reporting requirements.

The provisions of this section apply to CTPs and to municipalities in the State of Texas. Cities objected to the Commission proposal that the default allocation should be on a ratio of 1:1:1. The Commission revised its original proposal and adopted an allocation ratio that was an average of the ratios submitted by the CTPs.

Customer Protection - SB 86

Project No. 20787: Payphone Compliance

Adopted 3/1/00. This project included the review of old P.U.C. SUBST. R. § 23.54, relating to *Pay Telephone Service* as required by the Appropriations Act of 1997, HB 1, Article IX, Section 167. As a result of this review, the Commission repealed P.U.C. SUBST. R. § 23.54, relating to *Pay Telephone Servic,e* and added new § 26.102, relating to *Registration of Pay Telephone Service Providers*, as well as new §§ 26.341 through 26.347.

Project No. 21006: Protection Against Unauthorized Billing Charges ("Cramming")

Adopted 10/21/99. P.U.C. SUBST. R. § 26.32, Protection Against Unauthorized Billing Charges ("Cramming"), was adopted to implement the provisions concerning unauthorized charges on telephone bills as set forth in SB 86, now incorporated in PURA §§ 17.151-17.158. The rule applies to all "billing agents" and "service providers." The rule includes requirements for billing authorized charges, verification requirements, responsibilities of billing telecommunications utilities and service providers for unauthorized charges, customer notice requirements, and compliance and enforcement provisions. The rule ensures protection against cramming without impeding prompt delivery of products and services, minimizes cost and administrative requirements, and ensures consistency with FCC anti-cramming guidelines.

Project No. 21030: Limitations on Local Telephone Service Disconnections

Adopted 12/1/99. Amendments to P.U.C. SUBST. R. § 26.21, relating to General Provisions of Customer Service and Protection Rules; § 26.23, relating to Refusal of Service; § 26.24, relating to Credit Requirements and Deposits; § 26.27, relating to Bill Payment and Adjustments; § 26.28, relating to Suspension or Disconnection of Service; and §26.29, relating to Prepaid Local Telephone Service (PLTS), were adopted to implement SB 86, now incorporated in PURA § 55.012. These amendments (1) prohibit discontinuance of residential basic local service for nonpayment of long distance charges; (2) require that residential service payment first be applied to basic local service; (3) require a local service provider to offer and implement toll blocking to limit long distance charges after nonpayment for long distance service, and allow disconnection of local service for fraudulent activity; and (4) establish a maximum price that a local exchange company may charge a long distance service provider for toll blocking. The amendments apply to all local telephone service providers.

Project No. 22706: Discrimination, PURA Section 17.004(a)(4)

Adopted 11/16/00. This project resulted in changes to the Commission's rule language relating to geography and income. Policies contained in P.U.C. SUBST. R. § 26.4 were amended

to be in compliance with PURA. Specific mechanisms to implement and enforce the prohibitions on discrimination in P.U.C. SUBST. R. § 26.4 were included in Project No. 21423. The rules apply to all telecommunications providers.

Project No. 21419: Customer's Right to Choice (Slamming)

Adopted 6/14/00. An amendment to P.U.C. SUBST. R. § 26.130, Selection of Telecommunications Utilities, was adopted to implement SB86, now incorporated in PURA § 17.004(a)(5) and §§ 55.301-55.308. The amendment (1) eliminates the distinction between carrier-initiated and customer-initiated changes, (2) eliminates the information package mailing (negative option) as a verification method, (3) absolves the customer of any liability for charges incurred during the first 30 days after an unauthorized telecommunications utility change, (4) prohibits deceptive or fraudulent practices, (5) requires consistency with applicable federal laws and rules, and (6) addresses the related issue of preferred telecommunications utility freezes. The rule applies to all telecommunications utilities.

Project No. 21420: Administrative Penalties

Adopted 2/10/00. An amendment to P.U.C. PROC. R. § 22.246, Administrative Penalties, was adopted to implement SB86, now incorporated in PURA § 15.024. The amendment eliminates the 30 day "cure period" for violations of PURA Chapters 17, 55, and 64, clarifies that a violator may not opt to pay a penalty without taking appropriate corrective action, and incorporates the term "continuing violation."

Project No. 21421: Customer Proprietary Network Information, PURA § 17.004

Merged into project 21423. The project team met and reviewed the new statutory language concerning the privacy of customer consumption and credit information. The team concluded that no changes were needed to P.U.C. SUBST. R. § 26.122. Additional language to address these specific protections was addressed in Project No. 21423. There are ongoing federal proceedings as well on this subject.

Project No. 21422: Automatic Dial Announcing Devices

Adopted 1/27/00. An amendment to P.U.C. SUBST. R. § 26.125 was adopted to implement PURA § 55.126. The amendment shortens from 30 seconds to five seconds the amount of time an automatic dialing device must disconnect from a called person. The rule applies to all operators of automatic dial announcing devices.

Project No. 21423: Telephone Customer Service Rules: PURA §§ 17.003(c), 17.004, and 17.052(3)

Adopted 11/16/00. The purpose of this project was to recast existing customer protection rules for the new, competitive environment. Key issues were (1) applicability of rules to dominant certificated telecommunications utilities (DCTUs) and nondominant certificated telecommunications utilities (NCTUs), (2) failure of NCTUs to release lines, (3) discrimination protections, (4) prohibition of fraudulent, unfair, misleading, deceptive, and anti-competitive practices and (5) information disclosures.

Consumer groups and most DCTUs proposed that the customer service and protection rules apply equally to all certificated telecommunications utilities. In support of their position, these commenters made the following points: PURA requires uniform standards for all certificated telecommunications utilities; perspective for the rules should be the customer, not the classification of the provider; uniform rules will encourage more participation by giving some

assurance to reluctant consumers that the market will operate fairly; and since NCTUs indicated that they cannot survive unless they provide better service than DCTUs, then adhering to the DCTU standards should not be a problem.

NCTUs favored bifurcated rules with less restrictive requirements for NCTUs. In support of their position, NCTUs made the following points: PURA encourages competition, distinguishes between DCTUs and NCTUs in many areas, and does not require uniform rules for all certificated telecommunications utilities; the commission should apply regulatory mandates only when the market fails; uniform regulation is appropriate only when competitors are equally situated; and equal application of rules would create substantial burdens and costs for NCTUs and inhibit competition.

The adopted rules provide strong protections for all customers, while allowing some flexibility to NCTUs to encourage increased competition. Ultimately, a highly competitive local telecommunications market will benefit all customers.

Project No. 21424: Prepaid Calling Card Disclosures

Adopted 7/12/00. P.U.C. SUBST. R. § 26.34, *Telephone Prepaid Calling Services*, was adopted to implement PURA § 55.253. The rule applies to all prepaid calling services companies. The rule prescribes standards regarding the information a prepaid calling card company shall disclose to customers concerning rates and terms of service.

Project No. 21456: Certification, Registration and Reporting

Adopted 6/29/00. Amendments to P.U.C. SUBST. R. §26.107, Registration of Nondominant Telecommunications Carriers, § 26.109, Standards for Granting of COAs, and § 26.111, Standards for Granting SPCOAs, and new § 26.114, Suspension or Revocation of COAs and SPCOA, were adopted to implement PURA §§ 17.051-17.053. The amendments and new rule establish registration requirements for all nondominant carriers, require registration as a condition for doing business in Texas, establish customer service and protection standards, and address suspension or revocation of COAs and SPCOAs. The purpose of this project was to amend certification, registration, and reporting requirements for SPCOA/COA applicants to reflect legislative authority to revoke or suspend the certification of telecommunications utilities.

Pending Projects

Project No. 21329: Low Income/Automatic Enrollment, PURA § 17.004(f)

Scheduled adoption on 1/11/2001. This project will establish terms and conditions necessary for automatic enrollment of eligible telephone customers into Lifeline service and will result in an amendment to P.U.C. SUBST. R. § 26.412, *Lifeline Service and Link Up Service Programs*. The commission staff is continuing to work with the Texas Department of Human Services on an implementation plan for automatic enrollment of Lifeline services.